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Version

API version 28.3

Documentation version 28.3

History

Version	Date	Name	Description
1.0	2011/06/10	Emil Petkov	Initial version
1.1	2011/11/11	Emil Petkov	Added optional shipping params section for the shipping address
1.2	2012/04/18	Emil Petkov	Added dynamic descriptor functionality
1.3	2012/08/03	Emil Petkov	Added new transaction type AVS and Account Verification
2.0	2013/03/29	Emil Petkov	Added gaming and MOTO flags and support
2.1	2013/04/11	Emil Petkov	Split Credits with an initial ref transaction and Payouts without a reference transaction
2.2	2013/05/26	Emil Petkov	Added new transaction type InitRecurringSale3D - recurring payments with initial 3D
2.3	2014/01/15	Emil Petkov	Removed the transaction types DebitSale and IdealSale
2.4	2014/01/22	Emil Petkov	Added authorization code and issuer response code to API, section for issuer response codes
2.5	2014/01/29	Emil Petkov	Moto and gaming flags are now returned in the transaction response if present/marked in the request
2.6	2014/02/05	Emil Petkov	Dynamic descriptor params are now returned in the transaction response if present in the request
2.7	2014/02/15	Emil Petkov	Recurring advices are now returned in the transaction response if received from the issuer
2.8	2014/05/01	Emil Petkov	Added required vs. optional API params
2.9	2014/06/16	Emil Petkov	Currency handling rework and API description (different currency exponents, etc)
3.0	2014/08/28	Emil Petkov	Added risk related APIs - chargebacks, retrieval requests, blacklists
3.1	2014/11/25	Emil Petkov	Added API support for partial approvals
3.2	2014/12/03	Emil Petkov	Added WPF I18N specifics
3.3	2014/12/08	Emil Petkov	Added shopping carts and client integrations list
3.4	2014/12/16	Hristo Tanchev	Now the remote ip can be either a required or optional API param
3.5	2015/02/22	Dimitar Kostov	Added API for eZeeWallet and PayByVoucher via Yeepay
3.6	2015/02/23	Hristo Tanchev	Added API for CashU and Paysafecard
3.7	2015/03/13	Dimitar Kostov	Added API for Sofort
3.8	2015/03/18	Hristo Tanchev	Added API for PPRO
3.9	2015/04/15	Emil Petkov	New WPF API and WPF payment methods
4.0	2015/05/14	Hristo Tanchev	Added API for Neteller and ABN iDEAL
4.1	2015/06/15	Dimitar Kostov	Added WPF custom attributes - bin, tail
4.2	2015/08/10	Tsvetelina Borisova	Added WPF custom attributes - default, expiration date
4.3	2015/08/12	Vladimir Korichkov	Added API for WebMoney and POLi

Version	Date	Name	Description
4.4	2015/08/19	Tsvetelina Borisova	Added fraud related API for TC40/SAFE (fraud reports)
4.5	2015/08/27	Emil Petkov	3D attributes xid and cavv are now not re- quired in the MPI sync attempted only workflow, only eci is
4.6	2015/09/02	Emil Petkov	New transaction type PayByVoucher Sale for purchasing vouchers via credit cards. Reworked the PayByVouchers section
4.7	2015/09/04	Emil Petkov	Added penetration testing warning for merchants
4.8	2015/09/06	Emil Petkov	Reconcile API now works with ARN and transaction ID in addition to unique ID
4.9	2015/09/11	Hristo Tanchev	Added Electronic Commerce Indicator to notifications
5.0	2015/09/30	Vladimir Korichkov	Added API for INPay
5.1	2015/12/09	Pepa Simeonova	Added event parameter to notifications for fraud transactions.
5.2	2016/02/02	Hristo Tanchev	Added API for P24
5.3	2016/02/16	Tsvetelina Borisova	Added ARN in reconcile response if available.
5.4	2016/03/18	Tsvetelina Borisova	Added page for Manually Reviewed Transactions
5.5	2016/03/17	Tsvetelina Borisova	Added API for SDD.
5.6	2016/03/28	Emil Petkov	Extended PayByVouchers processing and WPF APIs with redeem type and card type
5.7	2016/04/08	Emil Petkov	Added info for statuspage.io, uptime and infrastructure, and new shopping carts
5.8	2016/05/11	Tsvetelina Borisova	Change the example for chargeback API - amount is returned in minor currency unit
5.9	2016/05/22	Emil Petkov	Now birth date API param is required only for Visa initial transactions with Financial Service MCCs (e.g. 6012)
6.0	2016/06/30	Pepa Simeonova	Added dynamic descriptor params to WPF payments.
6.1	2016/07/20	Stefan Slaveykov	Now usage can be either a required or optional API param
6.2	2016/07/21	Tsvetelina Borisova	Update documentation for chargebacks API
6.3	2016/12/08	George Naydenov	Added API for Trustly
6.4	2017/01/20	Plamen Terziev	Added AVS Codes
6.5	2017/02/16	Nikolay Petrov	Added API for PayPal Express Checkout
6.6	2017/03/20	Iskar Enev	Added API for Citadel
6.7	2017/03/30	Stanislav Mihailov	Added API for Instadebit/iDebit
6.8	2017/03/31	Tsvetelina Borisova	Added API for SCT Payout
6.9	2017/05/12	Nikolay Petrov	Added reference transaction unique id to the Reconcile API response
7.0	2017/05/13	Nikolay Petrov	Added API for Earthport
7.1	2017/05/15	Stanislav Mihailov	Added API for Wechat
7.2	2017/05/30	George Naydenov	Added API for Alipay
7.3	2017/06/05	Hristo Tanchev	Added API for PaySec
7.4	2017/06/06	Hristo Tenev	Added card brand and card number tags in reconcile response.
7.5	2017/06/27	Lukasz Wojcik	Added lifetime for WPF Payments.
7.6	2017/07/06	Nikolay Petrov	Removed AVS transaction type. AVS response code and text are returned in the transactions responses when present and supported or in the notifications for payments with asynchronous workflow.
7.7	2017/07/06	Iskar Enev	Added APM External Events.
7.8	2017/08/11	Samuil Goranov	Added support for optional shipping address params in Processing and WPF APIs.
7.9	2017/08/17	Lukasz Wojcik	Remove remote ip parameter for transactions with reference. It will be copied from reference transaction
8.0	2017/08/18	Lukasz Wojcik	Added invalid transaction types for amount parameter to WPF response.
8.1	2017/08/18	Emil Kirilov	Added search option by import date in Chargeback, Retrieval request and Fraud APIs.
8.2	2017/09/05	George Naydenov	Added API for RPN Payment
8.3	2017/10/13	Ventsislav Dimitrov	Added API for FashionCheque gift card and split payments.
8.4	2017/10/13	Pepa Simeonova	Added API for Intersolve gift card and split payments.
8.5	2017/10/13	Stanislav Mihailov	Added API for TCS gift card and split payments.
8.6	2017/10/23	Iskar Enev	Added Authentication Services and iSignThis.

Version	Date	Name	Description
8.7	2017/11/02	George Naydenov	Added API for RPN Payout
8.8	2017/11/24	Hristo Tenev	Added API for Paycommerce
8.9	2017/11/25	George Naydenov	API update with new sections Card, 3DS Card, Common. Removing older payment methods.
9.0	2017/12/18	George Naydenov	Added API for Neosurf.
9.1	2018/01/02	George Naydenov	Removed API for Inpay, ABN iDeal, Teleingreso and PayByVoucher.
9.2	2018/01/03	Iskar Enev & Nikolay Petrov	Added Tokenization service.
9.3	2018/01/12	Hristo Tanchev	Added API for Klarna.
9.4	2018/01/18	Stefan Petrov	Added ARN in WPF reconcile response if available.
9.5	2018/01/26	George Naydenov	Added API for Astropay Direct, Pago Facil, Link, Carulla, Davivienda.
9.6	2018/02/22	George Kostov & Hristo Tenev	Added API for Genesis KYC Services.
9.7	2018/02/22	Emil Kirilov	Added API for PSE.
9.8	2018/02/26	Stefan Petrov	Added API for RapiPago, Webpay, Banco de Chile.
9.9	2018/03/01	Stefan Petrov	Added API for Surtimax, Efecty, Cabal, Cencosud, Hipercard, Elo, Aura, Itau, Bradesco, Tarjeta Shopping, BBVA Bancomer, Boleto, Redpagos, Emprese De Energia, GiroPay, InstantTransfer, Multibanco.
10.0	2018/03/02	George Naydenov	Added API for OXXO, Argencard, Naranja, Nativa, Cartao Mercado Livre, Astropay Card, Banamex, Santander, Santander Cash, Zimpler PayU.
10.1	2018/03/02	Emil Kirilov	Added API for Baloto, Banco de Occidente, Banco do Brasil.
10.2	2018/04/10	Stefan Petrov	Added API for Entercash.
10.3	2018/05/08	Hristo Tenev	Added API for eZeeWallet Payout.
10.4	2018/05/31	Maya Nedyalkova	Added 3D MasterCard test cards.
10.5	2018/05/31	George Naydenov	Added API for QQPay.
10.6	2018/06/22	Hristo Tanchev	Added API for Credential on File (COF).
10.7	2018/07/05	George Naydenov	Removed Paysec and added Online Banking OBeP.
10.8	2018/07/18	Stanislav Mihailov	Added the API param issuer_oct_enabled to Visa-based Account Verification transactions, to allow merchant to verify if issuer supports OCTs for the given PAN
10.9	2018/07/27	Yordan Pulov	Added Money Transfer support to Payouts.
11.0	2018/08/01	George Naydenov	Removed Paysec Payout and added Bank Payout.
11.1	2018/08/02	Stanislav Mihailov	Remove API for Citadel
11.2	2018/08/31	Hristo Tenev	Added API for BitPay.
11.3	2018/08/31	Maya Nedyalkova	Add rc_code and rc_description in notification parameters.
11.4	2018/10/10	Ralitsa Borisova	Remove Paycommerce, RPN Payment, Link, Davivienda, Banco de Chile, Cartao Mercado Livre documentation.
11.5	2018/10/11	Emil Petkov	Introduced debt repayments - now birth date API param is required also for Mastercard/- Maestro initial transactions with Financial Service MCCs (e.g. 6012), where merchant is UK-based, transaction is domestic (with UK-based bin), and card type is DEBIT.
11.6	2018/11/02	Yordan Pulov and Stanislav Mihailov	Introduced Travel layer and Added Level 3 Travel API.
11.7	2018/11/21	Hristo Tenev	Added Payout support for BitPay
11.8	2018/12/05	Stefan Petrov	Added API for eZeeCard Payout
11.9	2018/12/05	Nikolay Petrov	Added Pay Later support to the WPF. Introduced Reminders module.
12.0	2019/01/07	Yordan Pulov	Changed Contract Merchant Category Codes for Level 3 Visa Car and Hotel Rental Transactions.
12.1	2019/01/31	Aleksandar Krastev	Introduced Consumer API. Extended Tokenization API to require a consumer. Extended WPF and Processing APIs to create consumers and tokenize card details in one step. WPF API can use saved cards to make payments.
12.2	2019/02/18	Yordan Pulov	Extend the Online Banking bank codes and add payment type.
12.3	2019/02/26	Stefan Petrov	Added API for Tola payments.
12.4	2019/03/13	Stanislav Mihailov	Added support for new non-money transfer payout types.
12.5	2019/03/19	Nikolay Valchanov	Added cardholder and expiration dates params to reconcile APIs.
12.6	2019/03/19	Vladislav Yakimov	Added retrieve endpoint for the Consumer API.

Version	Date	Name	Description
12.7	2019/03/22	Ventsislav Dimitrov	Added support for Preauthorizations.
12.8	2019/03/28	Nikolay Petrov	Added support for importation of external tokens and card details.
12.9	2019/04/01	Nikolay Petrov & Yasen Angelov	Added support for Pay by Link functionality.
13.0	2019/04/09	Hristo Tenev	Added API for transaction card expiry date update.
13.1	2019/04/11	Stanislav Mihailov	Added API support for purchase of cryptocurrency transactions.
13.2	2019/04/12	George Naydenov	Removed QQPay transaction type.
13.3	2019/04/15	Nikolay Valchanov	Added usage and description params to WPF reconcile API.
13.4	2019/04/22	Nikolay Valchanov	Added optional bic param to iDeal transactions.
13.5	2019/05/31	George Naydenov	Added Genesis Fx Services.
13.6	2019/06/07	Rumen Milushev	Added WPF API Reconcile by_date.
13.7	2019/06/14	Yordan Pulov	Extended the Online Banking bank codes and Bank Payout banks.
13.8	2019/07/02	Aleksandar Krastev	Added Tokenization API get masked card details for token.
13.9	2019/07/04	Vladislav Yakimov	Added API for TransferTo Payout and TransferTo Payers retrieve.
14.0	2019/07/09	Stefan Petrov	Extend the Online Banking bank codes.
14.1	2019/07/11	Pepa Simeonova	Added new money-transfer types.
14.2	2019/07/16	Hristo Tenev	Added API support for Business attributes.
14.3	2019/07/22	Pepa Simeonova	Added source_of_funds as an optional API param for OCT types (Credit, Payout)
14.4	2019/08/01	Stefan Petrov	Removed API for Astropay Card, Astropay Direct, Hipercard, Carulla, Emprese de Energia, Surtimax.
14.5	2019/08/05	Hristo Tanchev	Extended Processing and WPF APIs support for FX (Forex).
14.6	2019/08/05	Martin Lazarov	Added reversible amount in Preauthorization reconcile response.
14.7	2019/08/06	Rumen Milushev	Added MOTO flag to WPF transaction types: Authorize, Authorize3D, Sale, Sale3D.
14.8	2019/08/07	Yasen Angelov	Added the new optional param reminder_language to the WPF API.
14.9	2019/08/13	Stefan Petrov	Rebranding African Mobile payments.
15.0	2019/08/21	Nikolay Petrov	Added new status 'represented' in notifications for Processing and WPF APIs.
15.1	2019/08/22	Stefan Petrov	Added beneficiary params to refund transaction.
15.2	2019/09/03	Stefan Petrov	Use sync workflow for Neosurf transaction.
15.3	2019/09/13	Hristo Tanchev	Extended transaction response with transaction ID form card schemes.
15.4	2019/09/13	Yordan Pulov	Added Genesis SCA Checker service API.
15.5	2019/09/16	Nikolay Petrov	Added support for Account Verification to the WPF API.
15.6	2019/09/17	Ventsislav Dimitrov	Extended the supported Merchant Category Codes for Visa Preauthorization
15.7	2019/09/18	Aleksandar Krastev	Added Processed Transaction API for Card Present and Card Not Present transactions.
15.8	2019/09/20	Yordan Pulov	Extended Genesis SCA Checker service API documentation.
15.9	2019/09/20	Yordan Pulov	Added new fields and changed the endpoint for sending TransferToAPI requests.
16.0	2019/09/24	Rumen Milushev	Added 'agency_name' to Hotel Rental Travel attributes.
16.1	2019/09/25	Aleksandar Krastev	Changed filter flags of Processed Transaction API by_date and by_post_date endpoints.
16.2	2019/10/09	Aleksandar Krastev	Extended Chargeback API to return more attributes; Added flags filtering by origin and type of processing.
16.3	2019/10/10	Pepa Simeonova	Added new MPI parameters and SCA parameters.
16.4	2019/10/16	Aleksandar Krastev	Extended Retrieval Request API to return more attributes; Added flags filtering by origin and type of processing.
16.5	2019/10/17	Martin Lazarov	Extended the supported Merchant Category Codes for Visa Preauthorization.
16.6	2019/10/21	Yordan Pulov	Added support for UATP Travel.
16.7	2019/10/24	Rumen Milushev	Transferred Hotel Rentals, Car Rentals and Cruise Lines from Travel Level 3 data to Business Attributes.
16.8	2019/10/24	Martin Lazarov	Added Reference Transaction Unique ID to notification parameters for the reference-based transactions.
16.9	2019/10/31	Martin Lazarov	Added Capture tolerance for Mastercard and Maestro Preauthorizations.

Version	Date	Name	Description
17.0	2019/11/05	Yordan Pulov	Added new fields for TransferTo Payout.
17.1	2019/11/05	Nikolay Petrov	Added new supported currencies and banks for Bank Payout.
17.2	2019/11/15	Ventsislav Dimitrov	Added API support for purchasing Mastercard and Maestro crypto-currencies.
17.3	2019/11/15	Nikolay Petrov	Added optional bank params to the refund transaction.
17.4	2019/11/19	Stefan Petrov	Added Processed Batches API.
17.5	2019/11/20	Pepa Simeonova	Added sub_merchant_id as an optional dynamic descriptor param.
17.6	2019/11/20	Rumen Milushev	Added optional time extensions to the Processing Reconcile and WPF Reconcile APIs.
17.7	2019/11/21	Nikolay Petrov	Added support for Online Banking Unified Payment Interface (UPI) payment type.
17.8	2019/11/27	Stefan Petrov	Added Batch and Deposit Slip Numbers to Processed Transaction API response.
17.9	2019/11/28	Stefan Petrov	Removed API for Entercash and Banamex.
18.0	2019/12/03	Nikolay Petrov	Made BIC param optional for SddSale and SddInitRecurringSale transactions.
18.1	2019/12/05	Nikolay Petrov	Added supported bank codes for Online Banking that can be used with Netbanking payment type.
18.2	2019/12/12	George Naydenov	Added Trustly Select Account API. Extended parameters for Trustly Sale and Bank Pay-out.
18.3	2019/12/18	Rumen Milushev	Added descriptions for Airlines and Travel agencies in Business Attributes.
18.4	2019/12/20	George Naydenov	Added birth_date as conditionally required API param for Trustly Sale and Bank Pay-out.
18.5	2020/01/08	Hristo Tenev	Added Funding Account API for Card Present and Card Not Present transactions.
18.6	2020/01/21	Sridhar Belagod	Added Trustly Register Account API.
18.7	2020/01/29	Sridhar Belagod	Marked birth_date as optional param for Trustly and changed description.
18.8	2020/01/29	Ralitsa Borisova	Added Finnish language as part of the platform internationalization
18.9	2020/01/30	Sridhar Belagod	Updated supported countries for Trustly Sale.
19.0	2020/02/04	Dmitri Lihachev	Added API for Apple Pay.
19.1	2020/02/05	Sridhar Belagod	Removed unique_id param from Trustly RegisterAccount API. Updated birth_date format and extended the example to include country-specific format
19.2	2020/02/05	Stefan Petrov	Exposed querying and reconciling by ARN for Fraud reports, Chargebacks and Transactions.
19.3	2020/02/21	Ralitsa Borisova	Updated description for Trustly Sale.
19.4	2020/02/26	Rumen Milushev	Added batch_slip_number and deposit_slip_number as optional search params for ProcessedTransactions and ProcessedBatches.
19.5	2020/02/26	Rumen Milushev	Added type and card_number response params to Processed Transactions API response.
19.6	2020/02/28	Svilen Siderov	Updated MyBank supported countries for PPRO.
19.7	2020/03/11	Stanislav Mihailov	Added Payment Authorizations API for Card Present and Card Not Present authorizations.
19.8	2020/03/18	Nikolay Petrov	Added captured flag and capturable_amount param to Reconcile API response for authorizations.
19.9	2020/03/18	Stefan Petrov	Updated supported countries for PaysafeCard.
20.0	2020/03/19	Stefan Petrov	Removed France and United Kingdom from the supported countries for Sofort.
20.1	2020/03/18	Teodor Nikolov	Updated amount fields descriptions.
20.2	2020/03/23	George Naydenov	Added list of supported clearinghouses for Trustly register account call.
20.3	2020/03/23	Rumen Milushev	Added merchant_number, merchant_reference_transaction and capture_method to Chargebacks API response.
20.4	2020/03/27	Rumen Milushev	Unified response param to 'merchant_transaction_reference' in Payment Transactions and Chargebacks API.
20.5	2020/04/03	Ventsislav Dimitrov	Added asynchronous 3DSv2 support for 3D transaction types
20.6	2020/04/03	Svilen Siderov	Added card type, card subtype and card issuing bank to the Processing and WPF Reconcile API responses
20.7	2020/04/08	Stanislav Mihailov	Extended Risk data APIs (TC40/SAFE, Chargebacks, Retrieval Requests) to return a list of records by ARN or by transaction unique ID if the new list mode is enabled
20.8	2020/04/15	Stanislav Mihailov	Updated amount field for Card Present, Card Not Present and External payment authorizations.
20.9	2020/04/15	Martin Lazarov	Added details about Async Refund transaction type.
21.0	2020/04/15	George Naydenov	Added clearing houses list of supported IBANs and account numbers for Trustly Register Account
21.1	2020/04/20	Ventsislav Dimitrov	Changed the Mastercard test card numbers for card enrolled and card not participating in the 3DSv1.

Version	Date	Name	Description
21.2	2020/04/28	Stanislav Mihailov	Made gaming flag optional for purchase of VISA cryptocurrency transactions.
21.3	2020/04/28	Ventsislav Dimitrov	Added additional required recurring params for asynchronous InitRecurringSale3d using 3DSv2 authentication protocol.
21.4	2020/05/05	Ventsislav Dimitrov	Added more advanced merchant sequence flow diagrams for 3DSv1 and 3DSv2 authentication protocols using the Processing API.
21.5	2020/05/05	Ralitsa Borisova	Added Norwegian, Danish and Swedish language as part of the platform internationalization.
21.6	2020/05/11	Svilen Siderov	Added bank account number and bank identifier code to the Processing and WPF Reconcile API responses.
21.7	2020/05/15	Ventsislav Dimitrov	Added more detailed request examples for **synchronous** 3DSecure Visa and MasterCard transactions through the **3DSv1** and **3DSv2** authentication protocol.
21.8	2020/05/15	Ventsislav Dimitrov	Marked `xid` as out of scope for **synchronous** 3DSecure transactions using the **3DSv2** authentication protocol.
21.9	2020/05/15	Ventsislav Dimitrov	Extended the 3DSv2 documentation, authentication flow diagrams, and marked `usage` as required param when processing asynchronous 3DSecure transaction through 3DSv2 authentication protocol.
22.0	2020/05/19	Martin Lazarov	Updated the documentation related to Alipay transaction type, its transaction amount limits and currencies.
22.1	2020/06/01	Mario Chankov	Updated the description related to POLi payment.
22.2	2020/06/01	Svilen Siderov	Added Alipay Register Merchant API.
22.3	2020/06/09	Svilen Siderov	Added auth_start_date and auth_end_date to Payment Authorizations API request.
22.4	2020/06/24	Martin Lazarov	Added `authorization_code` to the API and WPF notification of various transaction types.
22.5	2020/06/25	Martin Lazarov	Added `retrieval_reference_number` to: API/WPF notifications, API/WPF response and API/WPF reconciliation response.
22.6	2020/07/01	Martin Lazarov	Removed **UPI** from Online banking supported payment types. Added new transaction type UPI.
22.7	2020/07/07	Nikolay Petrov	Added support for **AliPay QR** payment type in the Online Banking.
22.8	2020/07/10	Mario Chankov	Removed **Zimpler** and **Santander Cash**. Changes to supported countries for **MyBank**, **Safetypay** and **Santander**
22.9	2020/07/17	Ventsislav Dimitrov	Changed the 3DSv2-Method submission from HTTP GET to HTTP POST with signature mechanism, extended 3DSv2 authentication flow diagrams.
23.0	2020/07/17	Ventsislav Dimitrov	Added API endpoint for handling continuation after 3DSv2-Method submission.
23.1	2020/07/17	Ventsislav Dimitrov	Added `threeds_method_callback_url` as optional request param to 3DS transaction types in asynchronous workflow.
23.2	2020/07/17	Ventsislav Dimitrov	Added 3DS response attributes to the Processing reconciliation and notification for 3DS transaction types in asynchronous workflow.
23.3	2020/07/18	Ventsislav Dimitrov	Dropped the synchronous 3DSv2-Method workflow handling and authentication flow sequence diagrams.
23.4	2020/07/20	Alexey Kuznetsov	Renamed Klarna related transaction to Invoice. Also, migrate Klarna items to transaction items and introduce a new payment type for different types of invoices.
23.5	2020/07/21	Stefan Petrov	Added new **pending_hold** status for async transactions where finalized by user, but final update from provider not yet received (Sofort, etc)
23.6	2020/07/22	Stanislav Mihailov	Updated the documentation for TC40/SAFE APIs (fraud reports) when searching by date.
23.7	2020/07/22	Martin Lazarov	Added details regarding `partially_reversed` payment transaction state.
23.8	2020/07/22	Tsvetan Tsvetanov	Changed Sofort transaction parameter name from `bank_account_number` to `iban`
23.9	2020/08/04	Filipp Pirozhkov	Added new tokenization errors and client-side encryption errors.
24.0	2020/08/05	Vladimir Nudelman	Added `return_pending_url` as an optional param to the WPF API
24.1	2020/08/05	Stefan Petrov	Made **voucher_number** for Neosurf transactions conditionally required.
24.2	2020/08/06	Vladimir Nudelman	Added `cvv_result_code` as an optional parameter in the notifications, transaction responses, and reconciliation responses for both WPF and Processing APIs.
24.3	2020/08/17	Tsvetan Tsvetanov	Added `return_success_url_target` as optional request param to Trustly Sale via Processing API and WPF.
24.4	2020/08/24	Pepa Simeonova	Added Funds Transfer BAI and removed MCC restrictions for money transfer payouts.
24.5	2020/08/26	Martin Lazarov	Added new TransferTo transfer type: `C2C` (Consumer to Consumer) as well as new conditionally required sender parameters, a table with supported destination countries and currencies, and a link to Retrieve Payers API.
24.6	2020/08/26	Martin Lazarov	Removed `NB` as available bank code for INR Online Banking transactions as well as the corresponding Netbanking-related notes.
24.7	2020/09/02	Eduard Gataullin	Removed `currency` attribute from Recurring Sale transaction params, as recurring series work only with the same currency as the init recurring and cannot be changed.
24.8	2020/09/09	Martin Lazarov	Added new conditionally required attributes for TransferTo payouts for the B2B scenario - `document_reference_number` and `purpose_of_remittance`.
24.9	2020/09/16	Alexey Kuznetsov	Added API for Secure Invoice payments.

Version	Date	Name	Description
25.0	2020/09/16	Martin Lazarov	Renamed the following TransferTo payout attributes: `sender_lastname`, `sender_firstname`, `ifs_code` to: `sender_last_name`, `sender_first_name` and `indian_financial_system_code`.
25.1	2020/09/16	George Naydenov	Added API for PostFinance.
25.2	2020/09/29	Martin Lazarov	Clarified the descriptions of the following TransferTo payout attributes: `account_type`, `country`, `msisdn` and `sender_msisdn`
25.3	2020/10/02	Maya Nedyalkova	Added capability to AVS response attributes.
25.4	2020/10/21	Ventsislav Dimitrov	Added field format restrictions to the billing and shipping address for async 3DS transactions that are using the 3DSv2 authentication protocol.
25.5	2020/10/27	Ventsislav Dimitrov	Added international customer phone field format notes for async 3DS transactions that are using the 3DSv2 authentication protocol.
25.6	2020/10/27	Ventsislav Dimitrov	Added card holder field format restrictions for async 3DS transactions that are using the 3DSv2 authentication protocol.
25.7	2020/10/28	Kuznetsov Alexey	Added API for e-wallet solutions.
25.8	2020/10/28	Ventsislav Dimitrov	Added `state` field format notes for the billing and shipping attributes of async 3DS transactions that are using the 3DSv2 authentication protocol as per the EMVCo spec for 3DSv2.1.
25.9	2020/10/28	Ventsislav Dimitrov	Added hints for building the signatures in the 3DSv2 scope of 3DS transactions that require 3DS-Method submission.
26.0	2020/11/04	Ralitsa Borisova	Extend MCC range for Airlines segment in Business Attributes.
26.1	2020/11/04	Maya Nedyalkova	Added funds status attribute to the Reconcile API responses.
26.2	2020/11/13	Pepa Simeonova & Ventsislav Dimitrov	Added support for 3DSv2 authentication protocol to the Web Payment Form.
26.3	2020/11/16	Pepa Simeonova & Ventsislav Dimitrov	Added additional 3DS attributes to the WPF Notification and WPF reconcile API response.
26.4	2020/11/18	Ventsislav Dimitrov	Changed the additional `purchase` and `recurring` params of the 3DSv2 authentication protocol to **optional** for 3DS transactions through the processing API.
26.5	2020/11/24	Martin Lazarov	Update the description of `payment_type` for Online Banking transactions.
26.6	2020/11/24	George Naydenov	Extend Online Banking banks list and supported currencies.
26.7	2020/12/01	Mario Chankov	Removed Bancolombia and DirectDebit as supported bank codes for ARS and COP currencies under Online Banking.
26.8	2020/12/01	Stanislav Mihailov	Added `scheme_settlement_date` to Processing API and Processing API/WPF API reconciliation responses. Extended the `scheme_transaction_identifier` description and added it to WPF API reconciliation response.
26.9	2020/12/03	George Naydenov	Removed national_id attribute for Online Banking.
27.0	2020/12/08	Martin Lazarov	Added support for `sca_params` for Authorize and Sale transaction types and updated the description for the `exemption` field.
27.1	2020/12/08	Stanislav Mihailov	Added `credential_on_file_settlement_date` attribute to **Authorize** and **Sale** payment transaction types. Extended the **Credential On File** section with a description for `merchant_unscheduled` **COF** type.
27.2	2020/12/08	Vladimir Nudelman	Added support for `auth_network_outage` exemption to **Authorize** and **Sale** transactions.
27.3	2020/12/15	Ventsislav Dimitrov	Added information for `low_risk` SCA exemption to sync/async 3DSv2 transactions and extended the transaction example requests.
27.4	2020/12/15	Ventsislav Dimitrov	Changed the `usage` param to **optional** for async 3DS transactions through the 3DSv2 authentication protocol.
27.5	2020/12/16	Maya Nedyalkova	Removed API for **QIWI** and **InstantTransfer**.
27.6	2020/12/30	Ventsislav Dimitrov	Extended the validation and description of the **browser** request parameters in the scope of 3DS transactions through the 3DSv2 authentication protocol.
27.7	2021/01/06	Martin Lazarov	Added an example **EEA** MasterCard card number for simulating the `low-risk` exemption request in synchronous 3DSv2 workflow.
27.8	2021/01/26	Martin Lazarov	Extended the description of the `color_depth` attribute as part of the required async 3DSv2 browser device channel attributes within the 3DSv2 authentication protocol.
27.9	2021/01/26	Teodor Nikolov	Removed API for Trustly withdrawal.
28.0	2021/01/28	Stefan Petrov	Added bank codes for P24.
28.1	2021/01/28	Eduard Gataullin	Added verification and verification status KYC endpoints.
28.2	2020/02/04	Ventsislav Dimitrov	Added support for numeric chars in the browser language subtag for transactions with 3DSv2 authentication protocol.
28.3	2021/02/05	Pavel Abolmasov	Added `return_pending_url` as optional param for APMs via Processing API.

Introduction

You can get PHP SDK from https://github.com/GenesisGateway/genesis_php

Installation:
Get the SDK from GitHub and load it with Composer autoloader or include it in your own autoloader (The SDK usesPSR-4 spec).

```
git clone http://github.com/GenesisGateway/genesis_php genesis_php
cd genesis_php
composer install
```

You can get Node.js SDK from https://github.com/GenesisGateway/genesis.js

Installation:
Get the SDK from GitHub

```
git clone http://github.com/GenesisGateway/genesis.js genesis.js
cd genesis.js
npm install
```

Or install it using npm

```
npm install genesis.js
```

You can get Java SDK from http://github.com/GenesisGateway/genesis_java

Installation:
Get the SDK from GitHub and install Maven plugin

```
git clone http://github.com/GenesisGateway/genesis_java genesis_java
cd genesis_java
mvn clean install
```

Finally add this to your pom.xml file:

```
<dependency>
  <groupId>com.emerchantpay.gateway</groupId>
  <artifactId>genesis-java</artifactId>
  <version>1.3.1</version>
</dependency>
```

You can get cURL from https://curl.haxx.se

This document describes the usage of the payment gateway XML/JSON API.

The API allows you to trigger all supported transactions of the gateway and to retrieve information about transactions existing in the gateway. You can also retrieve chargeback information.

The payment API is synchronous (except for 3-D secure payments), it accepts HTTP POST or XML data and returns XML data. Connections are always secured via SSL both in test and live mode. Be sure to set Content-type: text/xml in your headers.

> The API cannot be accessed via HTTP GET.

> Current Java SDKs do not have the necessary root certificate installed. You need to download the CA with your browser and import it into cacerts manually.

Audience

This document is intended for technical staff integrating the XML/JSON API in the merchant's organization.

It is required that readers have working knowledge of programming languages, XML and JSON formats and UTF8 encodings.

Authentication

```
<?php

use \Genesis\Config as GenesisConfig;

// Load the pre-configured ini file...
GenesisConfig::loadSettings('/path/to/config.ini');

// ...OR, optionally, you can set the credentials manually
GenesisConfig::setEndpoint('<set_your_endpoint>');
GenesisConfig::setEnvironment('<set_your_environment>');
GenesisConfig::setUsername('<enter_your_username>');
GenesisConfig::setPassword('<enter_your_password>');
GenesisConfig::setToken('<enter_your_token>');

// You can find example configuration file in root directory of the module
```

```
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;;
import com.emerchantpay.gateway.util.Configuration;

// Create configuration
Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

configuration.setUsername("SET_YOUR_USERNAME");
configuration.setPassword("SET_YOUR_PASSWORD");
configuration.setToken("SET_YOUR_TOKEN");
```

You can override the path to the directory holding your configuration files (by default its config in the root directory of the module) via environmental variable NODE_CONFIG_DIR.

The first file to parse configuration from, is <your-config-dir>/default.json and based on the environment variable (NODE_ENV), you can specify your custom file; for example <your-config-dir>/<NODE_ENV_NAME>.json.

Its good practice to prevent web/direct access to your config directory and protect the files inside

Send username and password directly in url
`curl https://username:password@staging.gate.e-comprocessing.net:443/process/TERMINAL-TOKEN`

Or use -u flag
`curl -u username:password https://staging.gate.e-comprocessing.net:443/process/TERMINAL-TOKEN`

To interact with the payment API, you need to provide login credentials using standard HTTP Basic Authentication. (credentials can be found in your Admin interface.)

To decrease network traffic and response times, we recommend that you enforce sending authentication credentials directly in the first request.

Some implementations like e.g. the Java HTTPClient automatically try to guess the best authentication scheme. This can be overridden by setting the authorization to preemptive:

> HTTPClient.getParams.setAuthenticationPreemptivetrue;

URLs

Server API

API methods are called with the following structure:

`https://gate.e-comprocessing.net/process/TERMINAL_TOKEN/`

Single transaction reconciles can be done via this URL:

`https://gate.e-comprocessing.net/reconcile/TERMINAL_TOKEN/`

Date range reconciles can be done via this URL:

`https://gate.e-comprocessing.net/reconcile/by_date/TERMINAL_TOKEN/`

This URL allows retrieval of a list of supported banks based on the customers country and/or currency:

`https://gate.e-comprocessing.net/retrieve_inpay_banks/TERMINAL_TOKEN/`

For the test system use the following URLs:

`https://staging.gate.e-comprocessing.net/process/TERMINAL_TOKEN/`

`https://staging.gate.e-comprocessing.net/reconcile/TERMINAL_TOKEN/`

`https://staging.gate.e-comprocessing.net/reconcile/by_date/TERMINAL_TOKEN/`

`https://staging.gate.e-comprocessing.net/retrieve_inpay_banks/TERMINAL_TOKEN/`

WPF

The URL for the WPF API create method is:

`https://wpf.e-comprocessing.net/wpf`

For the test system the URL is:

`https://staging.wpf.e-comprocessing.net/wpf`

The URL for the WPF API reconcile method is:

`https://wpf.e-comprocessing.net/wpf/reconcile`

For the test system the URL is:

`https://staging.wpf.e-comprocessing.net/wpf/reconcile`

> Terminal token and login credentials can be found in your admin panel. To use our testing environment, refer to chapter Testing

Your admin panel can be found here:

`https://merchant.e-comprocessing.net/`

Consumer API

Create consumer:

`https://gate.e-comprocessing.net/v1/create_consumer/`

Retrieve consumer:

`https://gate.e-comprocessing.net/v1/retrieve_consumer/`

Update consumer:

`https://gate.e-comprocessing.net/v1/update_consumer/`

Disable consumer:

`https://gate.e-comprocessing.net/v1/disable_consumer/`

Enable consumer:

`https://gate.e-comprocessing.net/v1/enable_consumer/`

Get consumer cards:

`https://gate.e-comprocessing.net/v1/get_consumer_cards/`

For the test system use the following URLs:

`https://staging.gate.e-comprocessing.net/v1/create_consumer/`

`https://staging.gate.e-comprocessing.net/v1/update_consumer/`

`https://staging.gate.e-comprocessing.net/v1/disable_consumer/`

`https://staging.gate.e-comprocessing.net/v1/enable_consumer/`

`https://staging.gate.e-comprocessing.net/v1/get_consumer_cards/`

Tokenization API

Tokenize cardholder data:

`https://gate.e-comprocessing.net/v1/tokenize/`

Detokenize cardholder data:

`https://gate.e-comprocessing.net/v1/detokenize/`

Update the cardholder data (PAN cannot be updated):

`https://gate.e-comprocessing.net/v1/update_token/`

Validate if given token is valid for the merchant:

`https://gate.e-comprocessing.net/v1/validate_token/`

Delete a token:

`https://gate.e-comprocessing.net/v1/delete_token/`

Exchange masked cardholder data for token:

`https://gate.e-comprocessing.net/v1/get_card/`

For the test system use the following URLs:

`https://staging.gate.e-comprocessing.net/v1/tokenize/`

`https://staging.gate.e-comprocessing.net/v1/detokenize/`

`https://staging.gate.e-comprocessing.net/v1/update_token/`

`https://staging.gate.e-comprocessing.net/v1/validate_token/`

`https://staging.gate.e-comprocessing.net/v1/delete_token/`

`https://staging.gate.e-comprocessing.net/v1/get_card/`

> Terminal token and login credentials can be found in your admin panel. To use our testing environment, refer to chapter Testing

Genesis KYC Services JSON API

Testing environment

Create Consumer:

`POST https://staging.gate.e-comprocessing.net/kyc_service/create_consumer`

Update Consumer:

`POST https://staging.gate.e-comprocessing.net/kyc_service/update_consumer`

Create Transaction:

`POST https://staging.gate.e-comprocessing.net/kyc_service/create_transaction`

Update Transaction:

`POST https://staging.gate.e-comprocessing.net/kyc_service/update_transaction`

Upload Document:

`POST https://staging.gate.e-comprocessing.net/kyc_service/upload_document`

Download Document:

`POST https://staging.gate.e-comprocessing.net/kyc_service/download_document`

Verify Phone:

`POST https://staging.gate.e-comprocessing.net/kyc_service/verify_phone`

Verify Identity:

`POST https://staging.gate.e-comprocessing.net/kyc_service/verify_identity`

Verify Bank Account:

`POST https://staging.gate.e-comprocessing.net/kyc_service/verify_bank_account`

Create Authentication:

`POST https://staging.gate.e-comprocessing.net/kyc_service/create_authentication`

Update Authentication:

`POST https://staging.gate.e-comprocessing.net/kyc_service/update_authentication`

Create Verification:

`POST https://staging.gate.e-comprocessing.net/kyc_service/verifications`

Check Verification Status:

`POST https://staging.gate.e-comprocessing.net/kyc_service/verifications/status`

Production environment

Genesis KYC Services JSON API URLs for production environment:

Create Consumer:

`POST https://gate.e-comprocessing.net/kyc_service/create_consumer`

Update Consumer:

`POST https://gate.e-comprocessing.net/kyc_service/update_consumer`

Create Transaction:

`POST https://gate.e-comprocessing.net/kyc_service/create_transaction`

Update Transaction:

`POST https://gate.e-comprocessing.net/kyc_service/update_transaction`

Upload Document:

`POST https://gate.e-comprocessing.net/kyc_service/upload_document`

Download Document:

`POST https://gate.e-comprocessing.net/kyc_service/download_document`

Verify Phone:

`POST https://gate.e-comprocessing.net/kyc_service/verify_phone`

Verify Identity:

`POST https://gate.e-comprocessing.net/kyc_service/verify_identity`

Verify Bank Account:

`POST https://gate.e-comprocessing.net/kyc_service/verify_bank_account`

Create Authentication:

`POST https://gate.e-comprocessing.net/kyc_service/create_authentication`

Update Authentication:

`POST https://gate.e-comprocessing.net/kyc_service/update_authentication`

Create Verification:

`POST https://gate.e-comprocessing.net/kyc_service/verifications`

Check Verification Status:

`POST https://gate.e-comprocessing.net/kyc_service/verifications/status`

Transaction API

Update expiration date:

`PUT https://gate.e-comprocessing.net/v1/transaction/expiry_date/:transaction_unique_id`

For the test system use the following URLs:

`PUT https://staging.gate.e-comprocessing.net/v1/transaction/expiry_date/:transaction_unique_id`

Transactions

Invoking a Transaction

A transaction is invoked via HTTPS POST, parameters are passed as XML with UTF-8 encoding.

Card

RECURRING TRANSACTIONS

A recurring transaction describes a payment where the cardholder's account is periodically charged for a repeated delivery and use of a product or service (subscription, membership fee, etc.) over time. A recurring payment consists of an initial transaction and one or several repeated transactions. The "initial" transaction contains all relevant card and cardholder data, while the subsequent repeated transaction references an identifier which is returned with the response to the initial request.

INIT RECURRING SALE

An InitRecurringSale transaction initializes a recurring payment and is equal to a normal SaleTransaction except that it can be referenced as "initial" transaction in a RecurringSale transaction.

Note that if an InitRecurringSale is fully refunded, the recurring series is stopped and no more RecurringSales can be performed for that recurring series.

If an InitRecurringSale is partially refunded, the recurring series can continue with more RecurringSales

> This transaction type supports Tokenization.

> This transaction type supports Level 3 travel data.

> This transaction type could require business attributes.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale request = new InitRecurringSale();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **init_recurring_sale**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.

Parameter	Required	Format	Description
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_holder	required	string(255)	Full name of customer as printed on credit card (first name and last name at least)
card_number	required	13 to 16 digits	Complete cc number of customer
cvv	required*	3 to 4 digits	cvv of cc, requirement is based on terminal configuration
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted. Cannot be set together with `remember_card`
remember_card	optional	"true"	See Tokenize. Tokenizes cardholder parameters. Cannot be set together with `token`
consumer_id	optional	string(10)	See Consumers and Tokenization. Combine with `remember_card` to tokenize or with `token` to use token
credential_on_file	required*		See Credential On File (COF) for more details
initial_customer_initiated	required*	string(18)	Initial transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
subsequent_customer_initiated	required*	string(18)	Subsequent transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
merchant_unscheduled	optional	string(20)	Transaction is initiated by the merchant
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
birth_date	required*	dd-mm-yyyy	Required when MCC is a Financial Services one (e.g. MCC 6012) and either card brand is Visa or Mastercard/Maestro with UK-based merchant, UK-based bin (domestic), and DEBIT card type
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
fx_rate_id	optional	integer	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
business_attributes	required*		Check business attributes section.
event_start_date	required*	dd-mm-yyyy	The date when event starts in format dd-mm-yyyy
event_end_date	required*	dd-mm-yyyy	The date when event ends in format dd-mm-yyyy
event_organizer_id	required*	string	
event_id	required*	string	
date_of_order	required*	dd-mm-yyyy	The date when order was placed in format dd-mm-yyyy
delivery_date	required*	dd-mm-yyyy	Date of the expected delivery in format dd-mm-yyyy
name_of_the_supplier	required*	string	
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City

Parameter	Required	Format	Description
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [cvv_result_code] => M
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:50.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```


```
<payment_response content=[
    <transaction_type content=[init_recurring_sale]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <cvv_result_code content=[M]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:25:50Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```
{
    transaction_type: "init_recurring_sale",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    cvv_result_code: "M",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:25:50Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <cvv_result_code>M</cvv_result_code>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:50Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
consumer_id	string(10)	Consumer unique reference. See Consumers
token	string(36)	Plain-text token value. See Tokenization
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
recurring_advice_code	string(2)	Optional, if received in the response from the issuer
recurring_advice_text	string	Optional, describes the specific recurring advice code
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

Parameter	Type	Description
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.
scheme_transaction_identifier	string(32)	Id defined by card schemes. Corresponds to NETWORK DATA (field 63) for MasterCard or TRANS ID (field 62.2/125) for VISA.
scheme_settlement_date	string(4)	MasterCard settlement date in MMDD format (e.g. 0205). Corresponds to NETWORK DATA (field 15).

Error Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] => 57
    [code] => 340
    [message] => billing_address[zip_code] is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:51.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[init_recurring_sale]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[57]>
    <code content=[340]>
    <message content=[billing_address[zip_code] is invalid!]>
    <timestamp content=[2021-02-04T15:25:51Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "init_recurring_sale",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "57",
    code: "340",
    message: "billing_address[zip_code] is invalid!",
    timestamp: "2021-02-04T15:25:51Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <response_code>57</response_code>
  <code>340</code>
  <message>billing_address[zip_code] is invalid!</message>
  <timestamp>2021-02-04T15:25:51Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

RECURRING SALE

A RecurringSale transaction is a "repeated" transaction which follows and references a Init Recurring Sale transaction.

The card and cardholder data is omitted. Note that RecurringSales can be partially or fully refunded if configuration allows it, and this will not stop the recurring series.

This transaction type supports Level 3 travel data.

Business attributes are optional, but if submitted they will override the already supplied attributes in the initial init_recurring_sale / init_recurring_sale3d transaction.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\RecurringSale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('43672')
        ->setAmount('100');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.RecurringSale;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    RecurringSale request = new RecurringSale();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReferenceId("43672");
    request.setAmount(new BigDecimal(100));

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.recurring_sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "reference_id": "43672",
    "amount": "100",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>recurring_sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <reference_id>43672</reference_id>
    <amount>100</amount>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **recurring_sale**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
gaming	optional	"true"	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	Unique id returned by corresponding transaction
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
business_attributes	required*		Check business attributes section.
event_start_date	required*	dd-mm-yyyy	The date when event starts in format dd-mm-yyyy
event_end_date	required*	dd-mm-yyyy	The date when event ends in format dd-mm-yyyy
event_organizer_id	required*	string	
event_id	required*	string	
date_of_order	required*	dd-mm-yyyy	The date when order was placed in format dd-mm-yyyy
delivery_date	required*	dd-mm-yyyy	Date of the expected delivery in format dd-mm-yyyy
name_of_the_supplier	required*	string	

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => recurring_sale
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:51.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [sent_to_acquirer] => true
)
```

```xml
<payment_response content=[
    <transaction_type content=[recurring_sale]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:25:51Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <sent_to_acquirer content=[true]>
]>
```

```json
{
    transaction_type: "recurring_sale",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:25:51Z",
    descriptor: "Descriptor one",
    amount: "100",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>recurring_sale</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:51Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
recurring_advice_code	string(2)	Optional, if received in the response from the issuer
recurring_advice_text	string	Optional, describes the specific recurring advice code
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => recurring_sale
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] => 57
    [code] => 340
    [message] => billing_address[zip_code] is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:51.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[recurring_sale]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[57]>
    <code content=[340]>
    <message content=[billing_address[zip_code] is invalid!]>
    <timestamp content=[2021-02-04T15:25:51Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "recurring_sale",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "57",
    code: "340",
    message: "billing_address[zip_code] is invalid!",
    timestamp: "2021-02-04T15:25:51Z",
    descriptor: "Descriptor one",
    amount: "100",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>recurring_sale</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <response_code>57</response_code>
  <code>340</code>
  <message>billing_address[zip_code] is invalid!</message>
  <timestamp>2021-02-04T15:25:51Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

Parameter	Type	Description
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

AUTHORIZE

With authorize transactions, you can confirm that a credit card is valid and reserve the desired amount on the card.

After settling the transaction (e.g. shipping the goods), you can then capture the amount. The customer will not be billed until the capture has taken place, but the amount is reserved and the customer's credit card limit is reduced. Authorizes will automatically be cancelled after a certain timeframe, most likely one week.

For a typical e-commerce application it is recommended to authorize the amount on incoming orders and capture it when shipping the goods. If you are selling services or non-tangible goods, you can use the sale transaction, which combines authorize and capture.

If you choose not to serve the customer, consider to void the authorize to unfreeze the amount on the client's credit card.

Authorize transactions are also available as 3dsecure transactions

Transactions of this type support **auth_network_outage** exemption.

It informs the issuer that Strong Customer Authentication (SCA) was not possible because of a major outage of the authentication network and infrastructure

This transaction type supports Tokenization.

This transaction type supports Level 3 travel data.

This transaction type supports Preauthorizations.

This transaction type could require business attributes.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.AuthorizeRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AuthorizeRequest request = new AuthorizeRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **authorize**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.

Parameter	Required	Format	Description
gaming	optional	"true"	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
crypto	optional	"true"	Signifies whether a purchase of crypto-currency transaction is performed. Must be populated when purchasing crypto-currency with a VISA card and MCC is 6051. Must be populated when purchasing crypto-currency with a MASTER or INTL MAESTRO card and MCC is one of 6051, 6211. Contact tech-support@e-comprocessing.com for more details
preauthorization	optional	"true"	Signifies whether a preauthorization transaction is performed. Check the Preauthorizations section or contact tech support for more details.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_holder	required	string(255)	Full name of customer as printed on credit card (first name and last name at least)
card_number	required	13 to 16 digits	Complete cc number of customer
cvv	required*	3 to 4 digits	cvv of cc, requirement is based on terminal configuration
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted. Cannot be set together with `remember_card`
remember_card	optional	"true"	See Tokenize. Tokenizes cardholder parameters. Cannot be set together with `token`
consumer_id	optional	string(10)	See Consumers and Tokenization. Combine with `remember_card` to tokenize or with `token` to use token
credential_on_file	required*		See Credential On File (COF) for more details
initial_customer_initiated	required*	string(18)	Initial transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
subsequent_customer_initiated	required*	string(18)	Subsequent transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
merchant_unscheduled	optional	string(20)	Transaction is initiated by the merchant
credential_on_file_transaction_identifier	optional	string(15..32)	See Credential On File (COF) for more details
credential_on_file_settlement_date	optional	string(4)	See Credential On File (COF) for more details
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
birth_date	required*	dd-mm-yyyy	Required when MCC is a Financial Services one (e.g. MCC 6012) and either card brand is Visa or Mastercard/Maestro with UK-based merchant, UK-based bin (domestic), and DEBIT card type
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
fx_rate_id	optional	integer	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
business_attributes	required*		Check business attributes section.
event_start_date	required*	dd-mm-yyyy	The date when event starts in format dd-mm-yyyy
event_end_date	required*	dd-mm-yyyy	The date when event ends in format dd-mm-yyyy
event_organizer_id	required*	string	
event_id	required*	string	
date_of_order	required*	dd-mm-yyyy	The date when order was placed in format dd-mm-yyyy
delivery_date	required*	dd-mm-yyyy	Date of the expected delivery in format dd-mm-yyyy
name_of_the_supplier	required*	string	
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name

Parameter	Required	Format	Description
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.
sca_params	optional		SCA params
exemption	optional	string	The exemption that the transaction should take advantage of. Note that the requested exemption may not be accepted due to internal risk validations.
visa_merchant_id	required[5]	string(8)	VMID assigned by Visa if participating in Trusted merchant program.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [cvv_result_code] => M
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:51.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```xml
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <cvv_result_code content=[M]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <timestamp content=[2021-02-04T15:25:51Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```json
{
    transaction_type: "authorize",
    status: "approved",
    mode: "live",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    cvv_result_code: "M",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    timestamp: "2021-02-04T15:25:51Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <cvv_result_code>M</cvv_result_code>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:25:51Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
consumer_id	string(10)	Consumer unique reference. See Consumers
token	string(36)	Plain-text token value. See Tokenization
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.

Parameter	Type	Description
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.
scheme_transaction_identifier	string(32)	Id defined by card schemes. Corresponds to NETWORK DATA (field 63) for MasterCard or TRANS ID (field 62.2/125) for VISA.
scheme_settlement_date	string(4)	MasterCard settlement date in MMDD format (e.g. 0205). Corresponds to NETWORK DATA (field 15).

Error Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => expiration_year is invalid
    [message] => expiration_year is invalid
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:51.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[expiration_year is invalid]>
    <message content=[expiration_year is invalid]>
    <timestamp content=[2021-02-04T15:25:51Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "authorize",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "340",
    technical_message: "expiration_year is invalid",
    message: "expiration_year is invalid",
    timestamp: "2021-02-04T15:25:51Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>expiration_year is invalid</technical_message>
  <message>expiration_year is invalid</message>
  <timestamp>2021-02-04T15:25:51Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

CAPTURE

Capture settles a transaction which has been authorized before.

Do this when you are shipping goods, for example. A capture can only be used after an authorize on the same transaction and on the same terminal.

Therefore, the reference id of the authorized transaction is mandatory.

> You can also capture a partial amount of the initially authorized amount, e.g. if you want to give customers a discount. However, you cannot capture a higher amount than initially authorized.

> This transaction type supports Level 3 travel data.

> This transaction can be used to capture a Preauthorization.

Business attributes are optional, but if submitted they will override the already supplied attributes in the initial authorize / authorize3d transaction.

Transaction workflow:

1. The merchant sends authorize transaction to the gateway.
2. The gateway replies to it. One of returned values is the unique id of the transaction.
3. The merchant sends capture transaction. Its reference id is unique id of authorize response.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Capture');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('43672')
        ->setAmount('100')
        ->setCurrency('USD');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.CaptureRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    CaptureRequest request = new CaptureRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReferenceId("43672");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.capture(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "reference_id": "43672",
    "amount": "100",
    "currency": "USD",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>capture</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <reference_id>43672</reference_id>
    <amount>100</amount>
    <currency>USD</currency>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **capture**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	Unique id returned by corresponding transaction
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
business_attributes	required*		Check business attributes section.
event_start_date	required*	dd-mm-yyyy	The date when event starts in format dd-mm-yyyy
event_end_date	required*	dd-mm-yyyy	The date when event ends in format dd-mm-yyyy
event_organizer_id	required*	string	
event_id	required*	string	
date_of_order	required*	dd-mm-yyyy	The date when order was placed in format dd-mm-yyyy
delivery_date	required*	dd-mm-yyyy	Date of the expected delivery in format dd-mm-yyyy
name_of_the_supplier	required*	string	

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => capture
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [authorization_code] => 345678
    [response_code] => 00
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:52.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[capture]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <authorization_code content=[345678]>
    <response_code content=[00]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:25:52Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "capture",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    authorization_code: "345678",
    response_code: "00",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:25:52Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>capture</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <authorization_code>345678</authorization_code>
  <response_code>00</response_code>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars

Parameter	Type	Description
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. Seeissuer response codes for details
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => capture
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 430
    [technical_message] => Reference transaction has already been captured, and acquirer does not support partial/multiple capture
    [message] => Transaction declined.
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:52.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[capture]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[430]>
    <technical_message content=[Reference transaction has already been captured, and acquirer does not support partial/multiple capture]>
    <message content=[Transaction declined.]>
    <timestamp content=[2021-02-04T15:25:52Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "capture",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "430",
    technical_message: "Reference transaction has already been captured, and acquirer does not support partial/multiple capture",
    message: "Transaction declined.",
    timestamp: "2021-02-04T15:25:52Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>capture</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>430</code>
  <technical_message>Reference transaction has already been captured, and acquirer does not support partial/multiple capture</technical_message>
  <message>Transaction declined.</message>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

SALE

Sale transactions combine authorize and capture into one step.

Using a sale transaction, the amount is immediately billed to the customer's credit card. It can be reversed via avoid transaction on the same day of the transaction. Use sale transactions, if you are e.g. selling non-tangible goods or services.

Sale transactions are also available as 3dsecure transactions

Transactions of this type support **auth_network_outage** exemption.

It informs the issuer that Strong Customer Authentication (SCA) was not possible because of a major outage of the authentication network and infrastructure

This transaction type supports Tokenization.

This transaction type supports Level 3 travel data.

This transaction type could require business attributes.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **sale**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.

Parameter	Required	Format	Description
gaming	optional	"true"	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
crypto	optional	"true"	Signifies whether a purchase of crypto-currency transaction is performed. Must be populated when purchasing crypto-currency with a VISA card and MCC is 6051. Must be populated when purchasing crypto-currency with a MASTER or INTL MAESTRO card and MCC is one of 6051, 6211. Contact tech-support@e-comprocessing.com for more details
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_holder	required	string(255)	Full name of customer as printed on credit card (first name and last name at least)
card_number	required	13 to 16 digits	Complete cc number of customer
cvv	required*	3 to 4 digits	cvv of cc, requirement is based on terminal configuration
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted. Cannot be set together with `remember_card`
remember_card	optional	"true"	See Tokenize. Tokenizes cardholder parameters. Cannot be set together with `token`
consumer_id	optional	string(10)	See Consumers and Tokenization. Combine with `remember_card` to tokenize or with `token` to use token
credential_on_file	required*		See Credential On File (COF) for more details
initial_customer_initiated	required*	string(18)	Initial transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
subsequent_customer_initiated	required*	string(18)	Subsequent transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
merchant_unscheduled	optional	string(20)	Transaction is initiated by the merchant
credential_on_file_transaction_identifier	optional	string(15..32)	See Credential On File (COF) for more details
credential_on_file_settlement_date	optional	string(4)	See Credential On File (COF) for more details
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
birth_date	required*	dd-mm-yyyy	Required when MCC is a Financial Services one (e.g. MCC 6012) and either card brand is Visa or Mastercard/Maestro with UK-based merchant, UK-based bin (domestic), and DEBIT card type
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
fx_rate_id	optional	integer	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
business_attributes	required*		Check business attributes section.
event_start_date	required*	dd-mm-yyyy	The date when event starts in format dd-mm-yyyy
event_end_date	required*	dd-mm-yyyy	The date when event ends in format dd-mm-yyyy
event_organizer_id	required*	string	
event_id	required*	string	
date_of_order	required*	dd-mm-yyyy	The date when order was placed in format dd-mm-yyyy
delivery_date	required*	dd-mm-yyyy	Date of the expected delivery in format dd-mm-yyyy
name_of_the_supplier	required*	string	
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name

Parameter	Required	Format	Description
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.
sca_params	optional		SCA params
exemption	optional	string	The exemption that the transaction should take advantage of. Note that the requested exemption may not be accepted due to internal risk validations.
visa_merchant_id	required[5]	string(8)	VMID assigned by Visa if participating in Trusted merchant program.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => sale
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [cvv_result_code] => M
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:52.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```xml
<payment_response content=[
    <transaction_type content=[sale]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <cvv_result_code content=[M]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <timestamp content=[2021-02-04T15:25:52Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```python
{
    transaction_type: "sale",
    status: "approved",
    mode: "live",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    cvv_result_code: "M",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    timestamp: "2021-02-04T15:25:52Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <cvv_result_code>M</cvv_result_code>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
consumer_id	string(10)	Consumer unique reference. See Consumers
token	string(36)	Plain-text token value. See Tokenization
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.

Parameter	Type	Description
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.
scheme_transaction_identifier	string(32)	Id defined by card schemes. Corresponds to NETWORK DATA (field 63) for MasterCard or TRANS ID (field 62.2/125) for VISA.
scheme_settlement_date	string(4)	MasterCard settlement date in MMDD format (e.g. 0205). Corresponds to NETWORK DATA (field 15).

Error Response

```
stdClass Object
(
    [transaction_type] => sale
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] => 57
    [code] => 340
    [technical_message] => billing_address[zip_code] is invalid!
    [message] => billing_address[zip_code] is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:52.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[sale]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[57]>
    <code content=[340]>
    <technical_message content=[billing_address[zip_code] is invalid!]>
    <message content=[billing_address[zip_code] is invalid!]>
    <timestamp content=[2021-02-04T15:25:52Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "sale",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "57",
    code: "340",
    technical_message: "billing_address[zip_code] is invalid!",
    message: "billing_address[zip_code] is invalid!",
    timestamp: "2021-02-04T15:25:52Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <response_code>57</response_code>
  <code>340</code>
  <technical_message>billing_address[zip_code] is invalid!</technical_message>
  <message>billing_address[zip_code] is invalid!</message>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. Seeissuer response codes for details
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

ARGENCARD

Argencard is a debit or credit card used in Argentina. It allows online shoppers to pay offline for their online purchases at over 150,000 physical outlets.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Argencard');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('barney@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Buenos Aires')
        ->setBillingCountry('AR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>argencard</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rumble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>barney@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Buenos Aires</city>
      <country>AR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **argencard**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National Identifier number of the customer
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
AR

Successful Response

```
stdClass Object
(
    [transaction_type] => argencard
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:52.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>argencard</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => argencard
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:52.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>argencard</transaction_type>
  <status>error</status>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

AURA

Aura is a local Brazilian credit card.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Aura');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('barney@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Salvador')
        ->setBillingCountry('BR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>aura</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rumble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>barney@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Salvador</city>
      <country>BR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **aura**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National Identifier number of the customer
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
BR

Successful Response

```
stdClass Object
(
    [transaction_type] => aura
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:52.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>aura</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => aura
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:52.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>aura</transaction_type>
  <status>error</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

BANCONTACT

Bancontact is a local Belgian debit card scheme. All Belgian debit cards are co-branded Bancontact and Maestro.

Transaction flow for a consumer is identical to a Maestro payment.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bcmc</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <amount>100</amount>
  <currency>EUR</currency>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>12114</zip_code>
    <city>Brussels</city>
    <country>BE</country>
  </billing_address>
</payment_transaction>'
```

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\PPRO');
    $request = $genesis->request();

    $request
        ->setPaymentType('bcmc')
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('EUR')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('12114')
        ->setBillingCity('Brussels')
        ->setBillingCountry('BE');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.PProRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PProRequest request = new PProRequest();

    request.setPaymentType("bcmc");
    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("12114");
    request.setBillingCity("Brussels");
    request.setBillingCountry("BE");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.ppro(
  {
    "payment_type": "bcmc",
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "EUR",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "12114",
      "city": "Brussels",
      "country": "BE"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>ppro</transaction_type>
    <payment_type>bcmc</payment_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>EUR</currency>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>12114</zip_code>
      <city>Brussels</city>
      <country>BE</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	**ppro** or **bcmc**. Contact tech support at tech-support@e-comprocessing.com for more details.
payment_type	required*	bcmc	Bancontact Mr. Cash. Contact tech support for more details
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address

Parameter	Required	Format	Description
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported currencies and countries:

Currency code	Country code
EUR	BE

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bcmc</transaction_type>
  <status>pending_async</status>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <mode>live</mode>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response


```
stdClass Object
(
    [transaction_type] => ppro
    [status] => pending_async
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [mode] => live
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:52.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[pending_async]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <mode content=[live]>
    <timestamp content=[2021-02-04T15:25:52Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "pending_async",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "119643250547501c79d8295",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    mode: "live",
    timestamp: "2021-02-04T15:25:52Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>pending_async</status>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <mode>live</mode>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
transaction_id	string(255)	Unique transaction id defined by merchant
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bcmc</transaction_type>
  <status>error</status>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:25:52Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response


```
stdClass Object
(
    [transaction_type] => ppro
    [status] => error
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [code] => 110
    [technical_message] =>
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:53.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[error]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <code content=[110]>
    <technical_message content=[]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:25:53Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "ppro",
    status: "error",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "119643250547501c79d8295",
    code: "110",
    technical_message: "",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:25:53Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "false",
}
```



```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>error</status>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <code>110</code>
  <payment_transaction>technical_message</payment_transaction>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:25:53Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
transaction_id	string(255)	Unique transaction id defined by merchant
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

CABAL

Cabal is a local debit/credit card brand in Argentina which can be used for online purchases.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Cabal');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('braney_rubble')
        ->setNationalId('8812128812')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>cabal</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>USD</currency>
   <consumer_reference>braney_rubble</consumer_reference>
   <national_id>8812128812</national_id>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **cabal**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National Identifier number of the customer
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City

Parameter	Required	Format	Description
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries

Country Name	Country Code
Argentina	AR

Successful Response

```
stdClass Object
(
    [status] => pending_async
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61d0
    [mode] => live
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:53.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <status>pending_async</status>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61d0</redirect_url>
  <mode>live</mode>
  <timestamp>2021-02-04T15:25:53Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
transaction_id	string(255)	Unique transaction id defined by merchant
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [status] => error
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [code] => 110
    [message] => Something went wrong, please contact support!
    [mode] => live
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:53.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <status>error</status>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <mode>live</mode>
  <timestamp>2021-02-04T15:25:53Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
transaction_id	string(255)	Unique transaction id defined by merchant
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

CENCOSUD

Cencosud is a local credit card in Argentina

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Cencosud');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('barney@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Buenos Aires')
        ->setBillingCountry('AR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>cencosud</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rumble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>barney@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Buenos Aires</city>
      <country>AR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **cencosud**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National Identifier number of the customer
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
AR

Successful Response

```
stdClass Object
(
    [transaction_type] => cencosud
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:53.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>cencosud</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:53Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => cencosud
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:53.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>cencosud</transaction_type>
  <status>error</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:25:53Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

CREDIT (CFT)

Credits (also known as Credit Fund Transfer a.k.a. CFT) can be done with an initial reference transaction.

This transaction type allows you to transfer funds to a previously charged card. The amount can be higher than the charged reference. Credits can only be done on former sale, sale3d, init recurring sale, init recurring sale3d, recurring sale or capture transaction. Therefore, the **reference_id** for the corresponding transaction is mandatory.

Both Visa and Mastercard/Maestro credits are authorized real-time.

Note that for exceptional cases with some countries Visa OCTS will not be authorized through the schemes but batched for offline settlement on the same day. This means that the authorization code and issuer response code will not be available only for them.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Credit');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setReferenceId('43672')
        ->setAmount('100');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.CreditRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    CreditRequest request = new CreditRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setReferenceId("43672");
    request.setAmount(new BigDecimal(100));

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.credit(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "reference_id": "43672",
    "amount": "100"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>credit</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <reference_id>43672</reference_id>
    <amount>100</amount>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **credit**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
reference_id	required	string(32)	Unique id returned by corresponding transaction
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
source_of_funds	optional	string	Specify the source of funds with one of`credit`, `debit`, `prepaid`, `cash`, `other_debit_account`, `other_credit_account`.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => credit
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:53.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
)
```

```
<payment_response content=[
    <transaction_type content=[credit]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <timestamp content=[2021-02-04T15:25:53Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
]>
```

```
{
    transaction_type: "credit",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    timestamp: "2021-02-04T15:25:53Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>credit</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:25:53Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Error Response

```
stdClass Object
(
    [transaction_type] => credit
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] => 57
    [code] => 410
    [technical_message] => No approved reference transaction found
    [message] => No approved reference transaction found
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:53.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
)
```

```
<payment_response content=[
    <transaction_type content=[credit]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[57]>
    <code content=[410]>
    <technical_message content=[No approved reference transaction found]>
    <message content=[No approved reference transaction found]>
    <timestamp content=[2021-02-04T15:25:53Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
]>
```

```
{
    transaction_type: "credit",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "57",
    code: "410",
    technical_message: "No approved reference transaction found",
    message: "No approved reference transaction found",
    timestamp: "2021-02-04T15:25:53Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>credit</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <response_code>57</response_code>
  <code>410</code>
  <technical_message>No approved reference transaction found</technical_message>
  <message>No approved reference transaction found</message>
  <timestamp>2021-02-04T15:25:53Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

ELO

Elo is a local Brazilian payment card.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Elo');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('barney@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Salvador')
        ->setBillingCountry('BR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>elo</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>USD</currency>
   <consumer_reference>barney_rumble</consumer_reference>
   <national_id>8812128812</national_id>
   <birth_date>30-12-1992</birth_date>
   <customer_email>barney@example.com</customer_email>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Salvador</city>
     <country>BR</country>
   </billing_address>
   <risk_params>
     <user_id>123456</user_id>
   </risk_params>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **elo**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National Identifier number of the customer
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code

Parameter	Required	Format	Description
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
BR

Successful Response

```
stdClass Object
(
    [transaction_type] => elo
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:54.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>elo</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:54Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details

Parameter	Type	Description
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => elo
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:54.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>elo</transaction_type>
  <status>error</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:25:54Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

NARANJA

Naranja is a local credit card issued in Argentina which can be used for purchases over the internet.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Naranja');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('barney@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Buenos Aires')
        ->setBillingCountry('AR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>naranja</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rumble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>barney@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Buenos Aires</city>
      <country>AR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **naranja**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National Identifier number of the customer
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
AR

Successful Response

```
stdClass Object
(
    [transaction_type] => naranja
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:54.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>naranja</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:54Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => naranja
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:54.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>naranja</transaction_type>
  <status>error</status>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:25:54Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

NATIVA

Nativa is an Argentinian credit card provided by the National Bank of Argentina.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Nativa');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('barney@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Buenos Aires')
        ->setBillingCountry('AR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>nativa</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rumble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>barney@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Buenos Aires</city>
      <country>AR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **nativa**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National Identifier number of the customer
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
AR

Successful Response

```
stdClass Object
(
    [transaction_type] => nativa
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:54.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>nativa</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:54Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => nativa
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:54.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>nativa</transaction_type>
  <status>error</status>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:25:54Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

TARJETA SHOPPING

Tarjeta Shopping is a cash payment in Argentina.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\TarjetaShopping');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rubble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Rosario')
        ->setBillingCountry('AR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>tarjeta_shopping</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rubble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Rosario</city>
      <country>AR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **tarjeta_shopping**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National Identifier number of the customer
birth_date	optional	string(20)	Birth date of the customer
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
AR

Successful Response

```
stdClass Object
(
    [transaction_type] => tarjeta_shopping
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:54.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>tarjeta_shopping</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:25:54Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => tarjeta_shopping
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:54.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>tarjeta_shopping</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:25:54Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Non-financial Transactions

ACCOUNT VERIFICATION

Account Verification transactions are implemented using the so-called zero-value auths.

Using an account verification transaction, the account existence for a given cardholder can be verified without any financial impact.

Note the account verification can also carry on an AVS request, thus you can also get the AVS response code and text by the schemes along with it. Refer to section AVS Status Codes for more information.

This transaction type supports Tokenization.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\AccountVerification');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.AccountVerificationRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AccountVerificationRequest request = new AccountVerificationRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.account_verification(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>account_verification</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Example When Issuer Supports Oct For This Pan:

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\AccountVerification');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setIssuerOctEnabled('true')
        ->setRemoteIp('245.253.2.12')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.AccountVerificationRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AccountVerificationRequest request = new AccountVerificationRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setIssuerOctEnabled("true");
    request.setRemoteIp("245.253.2.12");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.account_verification(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "issuer_oct_enabled": true,
    "remote_ip": "245.253.2.12",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>account_verification</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <issuer_oct_enabled>true</issuer_oct_enabled>
   <remote_ip>245.253.2.12</remote_ip>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4200000000000000</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **account_verification**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
issuer_oct_enabled	optional	true	Supported only by Visa. When submitted, Visa checks if the given PAN supports OCTs at the issuer. When not submitted, it is interpreted as a normal account verification.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
card_holder	required	string(255)	Full name of customer as printed on credit card (first name and last name at least)
card_number	required	13 to 16 digits	Complete cc number of customer
cvv	required*	3 to 4 digits	cvv of cc, requirement is based on terminal configuration
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted. Cannot be set together with `remember_card`
remember_card	optional	"true"	See Tokenize. Tokenizes cardholder parameters. Cannot be set together with `token`
consumer_id	optional	string(10)	See Consumers and Tokenization. Combine with `remember_card` to tokenize or with `token` to use token
credential_on_file	required*		See Credential On File (COF) for more details
initial_customer_initiated	required*	string(18)	Initial transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
subsequent_customer_initiated	required*	string(18)	Subsequent transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
merchant_unscheduled	optional	string(20)	Transaction is initiated by the merchant
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address

Parameter	Required	Format	Description
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => account_verification
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [authorization_code] => 345678
    [response_code] => 00
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:55.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [sent_to_acquirer] => true
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```
<payment_response content=[
    <transaction_type content=[account_verification]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <authorization_code content=[345678]>
    <response_code content=[00]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:25:55Z]>
    <descriptor content=[Descriptor one]>
    <sent_to_acquirer content=[true]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```
{
    transaction_type: "account_verification",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    authorization_code: "345678",
    response_code: "00",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:25:55Z",
    descriptor: "Descriptor one",
    sent_to_acquirer: "true",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```



```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>account_verification</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <authorization_code>345678</authorization_code>
  <response_code>00</response_code>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:55Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <sent_to_acquirer>true</sent_to_acquirer>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_transaction>
```


Example When Issuer Supports Oct For This Pan:

Successful Response


```
stdClass Object
(
    [transaction_type] => account_verification
    [status] => approved
    [issuer_oct_enabled] => true
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [authorization_code] => 345678
    [response_code] => 00
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:55.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [sent_to_acquirer] => true
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```xml
<payment_response content=[
    <transaction_type content=[account_verification]>
    <status content=[approved]>
    <issuer_oct_enabled content=[true]>
    <mode content=[live]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <authorization_code content=[345678]>
    <response_code content=[00]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:25:55Z]>
    <descriptor content=[Descriptor one]>
    <sent_to_acquirer content=[true]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```json
{
    transaction_type: "account_verification",
    status: "approved",
    issuer_oct_enabled: "true",
    mode: "live",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    authorization_code: "345678",
    response_code: "00",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:25:55Z",
    descriptor: "Descriptor one",
    sent_to_acquirer: "true",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>account_verification</transaction_type>
  <status>approved</status>
  <issuer_oct_enabled>true</issuer_oct_enabled>
  <mode>live</mode>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <authorization_code>345678</authorization_code>
  <response_code>00</response_code>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:55Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <sent_to_acquirer>true</sent_to_acquirer>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_transaction>
```


Example When Issuer Does Not Support Oct For This Pan:

Successful Response

```
stdClass Object
(
    [transaction_type] => account_verification
    [status] => declined
    [issuer_oct_enabled] => false
    [mode] => live
    [transaction_id] => 1196432505475 01c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [authorization_code] => 345678
    [response_code] => 00
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:55.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [sent_to_acquirer] => true
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```
<payment_response content=[
    <transaction_type content=[account_verification]>
    <status content=[declined]>
    <issuer_oct_enabled content=[false]>
    <mode content=[live]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <authorization_code content=[345678]>
    <response_code content=[00]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:25:55Z]>
    <descriptor content=[Descriptor one]>
    <sent_to_acquirer content=[true]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```
{
    transaction_type: "account_verification",
    status: "declined",
    issuer_oct_enabled: "false",
    mode: "live",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    authorization_code: "345678",
    response_code: "00",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:25:55Z",
    descriptor: "Descriptor one",
    sent_to_acquirer: "true",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>account_verification</transaction_type>
  <status>declined</status>
  <issuer_oct_enabled>false</issuer_oct_enabled>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <authorization_code>345678</authorization_code>
  <response_code>00</response_code>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:25:55Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <sent_to_acquirer>true</sent_to_acquirer>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
consumer_id	string(10)	Consumer unique reference. See Consumers
token	string(36)	Plain-text token value. See Tokenization
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
issuer_oct_enabled	string	Present only if merchant has submitted issuer oct enabled flag in the request to check if issuer supports OCTs for the given PAN. True if the issuer supports OCTs for this PAN, false otherwise.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
sent_to_acquirer	string(255)	"true" or "false"
scheme_transaction_identifier	string(32)	Id defined by card schemes. Corresponds to NETWORK DATA (field 63) for MasterCard or TRANS ID (field 62.2/125) for VISA.
scheme_settlement_date	string(4)	MasterCard settlement date in MMDD format (e.g. 0205). Corresponds to NETWORK DATA (field 15).

Error Response

```
stdClass Object
(
    [transaction_type] => account_verification
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => expiration_year is invalid
    [message] => expiration_year is invalid
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:55.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[account_verification]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[expiration_year is invalid]>
    <message content=[expiration_year is invalid]>
    <timestamp content=[2021-02-04T15:25:55Z]>
    <descriptor content=[Descriptor one]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "account_verification",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "340",
    technical_message: "expiration_year is invalid",
    message: "expiration_year is invalid",
    timestamp: "2021-02-04T15:25:55Z",
    descriptor: "Descriptor one",
    sent_to_acquirer: "false",
}
```

```
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>account_verification</transaction_type>
    <status>error</status>
    <mode>live</mode>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
    <code>340</code>
    <technical_message>expiration_year is invalid</technical_message>
    <message>expiration_year is invalid</message>
    <timestamp>2021-02-04T15:25:55Z</timestamp>
    <descriptor>Descriptor one</descriptor>
    <sent_to_acquirer>false</sent_to_acquirer>
  </payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z

Parameter	Type	Description
descriptor	string(255)	Static descriptor MID info as configured on the gateway
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

3DS Card

To learn more about 3D Secure and supported authentication protocols, please, visit 3D-Secure Section.

AUTHORIZE 3D

Authorize3D transactions basically have the same request as standard authorize transactions.

Authorize3D transactions can be handled synchronous or asynchronous depending on the parameters passed. If mpi params is passed the workflow will be synchronous. If notification url, return success url and return failure url are passed the workflow will be asynchronous.

To settle Authorize3D transactions, normal capture transactions are used. As the 3-D secure process already took place, there is no need to do the verification again when capturing.

This transaction type supports Tokenization.

This transaction type supports Level 3 travel data.

This transaction type supports Partial Approvals.

This transaction type supports Preauthorizations.

This transaction type could require business attributes.

An exemption from Strong Customer Authentication (SCA) can be requested by submitting an **exemption** with `low_risk` under SCA params.

In case the issuer accepts the exemption, a step up in the authentication flow might not be required because the transaction's risk analysis has already been performed by acquirer.

Note, the requested exemption might not be accepted due to internal risk validations.

For example, to be able to utilize the low risk exemption, the BIN country of the card must be part of the European Economic Area (EEA).

Furthermore, the acquirer could accept the merchant low-risk exemption request only if the transaction amount does not exceed the acquirer low-risk exemption threshold.

Finally, the ACS might not acknowledge the merchant/acquirer's exemption request and may still require a step up in the cardholder authentication.

Visa Synchronous 3 D Sv1 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4711100000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('05')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiXid('0pv62FIrT5qQODB7DCewKgEBAQI=')
        ->setMpiProtocolVersion('1')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4711100000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"05", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "xid"=>"0pv62FIrT5qQODB7DCewKgEBAQI=", "protocol_version"=>"1"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4711100000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "05",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "xid": "0pv62FIrT5qQODB7DCewKgEBAQI=",
      "protocol_version": "1"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>authorize3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4711100000000000</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>05</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <xid>0pv62FIrT5qQODB7DCewKgEBAQI=</xid>
     <protocol_version>1</protocol_version>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv1 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('02')
        ->setMpiCavv('jlk/+AMJkDARYwAAA2SqCUQAAAA=')
        ->setMpiXid('UVg1QThJU1FVV1hWWVQxQkxZNU8=')
        ->setMpiProtocolVersion('1');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"02", "cavv"=>"jlk/+AMJkDARYwAAA2SqCUQAAAA=", "xid"=>"UVg1QThJU1FVV1hWVQxQkxZNU8=", "protocol_version"=>"1"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "02",
      "cavv": "jlk/+AMJkDARYwAAA2SqCUQAAAA=",
      "xid": "UVg1QThJU1FVV1hWWVQxQkxZNU8=",
      "protocol_version": "1"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>02</eci>
      <cavv>jlk/+AMJkDARYwAAA2SqCUQAAAA=</cavv>
      <xid>UVg1QThJU1FVV1hWWVQxQkxZNU8=</xid>
      <protocol_version>1</protocol_version>
    </mpi_params>
  </payment_transaction>'
```

Visa Synchronous 3 D Sv1 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4711100000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('06')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiXid('0pv62FIrT5qQODB7DCewKgEBAQI=')
        ->setMpiProtocolVersion('1')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4711100000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"06", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "xid"=>"0pv62FIrT5qQODB7DCewKgEBAQI=", "protocol_version"=>"1"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4711100000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "06",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "xid": "0pv62FIrT5qQODB7DCewKgEBAQI=",
      "protocol_version": "1"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>authorize3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4711100000000000</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>06</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <xid>0pv62FIrT5qQODB7DCewKgEBAQI=</xid>
     <protocol_version>1</protocol_version>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv1 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('01')
        ->setMpiCavv('hlk/+AMJkDARYwAAA2SqCUQAAAA=')
        ->setMpiXid('UVg1QThJU1FVV1hWWVQxQkxZNU8=')
        ->setMpiProtocolVersion('1');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"01", "cavv"=>"hlk/+AMJkDARYwAAA2SqCUQAAAA=", "xid"=>"UVg1QThJU1FVV1hWVQxQkxZNU8=", "protocol_version"=>"1"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "01",
      "cavv": "hlk/+AMJkDARYwAAA2SqCUQAAAA=",
      "xid": "UVg1QThJU1FVV1hWWVQxQkxZNU8=",
      "protocol_version": "1"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>01</eci>
      <cavv>hlk/+AMJkDARYwAAA2SqCUQAAAA=</cavv>
      <xid>UVg1QThJU1FVV1hWWVQxQkxZNU8=</xid>
      <protocol_version>1</protocol_version>
    </mpi_params>
  </payment_transaction>'
```

Asynchronous 3 D Sv1 Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
  </payment_transaction>'
```

Visa Synchronous 3 D Sv2 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4012000000060085')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('05')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5d77b200-49f4-0139-c22f-00505690f91e')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4012000000060085");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"05", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "protocol_version"=>"2", "directory_server_id"=>"5d77b200-49f4-0139-c22f-00505690f91e"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4012000000060085",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "05",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "protocol_version": "2",
      "directory_server_id": "5d77b200-49f4-0139-c22f-00505690f91e"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>authorize3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4012000000060085</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>05</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <protocol_version>2</protocol_version>
     <directory_server_id>5d77b200-49f4-0139-c22f-00505690f91e</directory_server_id>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv2 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('02')
        ->setMpiCavv('kAOImea0C/2ta1NZl4Hhwslmomqj')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5d809bc0-49f4-0139-c22f-00505690f91e');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"02", "cavv"=>"kAOImea0C/2ta1NZl4Hhwslmomqj", "protocol_version"=>"2", "directory_server_id"=>"5d809bc0-49f4-0139-c22f-00505690f91e"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "02",
      "cavv": "kAOImea0C/2ta1NZl4Hhwslmomqj",
      "protocol_version": "2",
      "directory_server_id": "5d809bc0-49f4-0139-c22f-00505690f91e"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>02</eci>
      <cavv>kAOImea0C/2ta1NZl4Hhwslmomqj</cavv>
      <protocol_version>2</protocol_version>
      <directory_server_id>5d809bc0-49f4-0139-c22f-00505690f91e</directory_server_id>
    </mpi_params>
  </payment_transaction>'
```

Visa Synchronous 3 D Sv2 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4012000000060085')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('06')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5d891580-49f4-0139-c22f-00505690f91e')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4012000000060085");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"06", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "protocol_version"=>"2", "directory_server_id"=>"5d891580-49f4-0139-c22f-00505690f91e"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4012000000060085",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "06",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "protocol_version": "2",
      "directory_server_id": "5d891580-49f4-0139-c22f-00505690f91e"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>authorize3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4012000000060085</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>06</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <protocol_version>2</protocol_version>
     <directory_server_id>5d891580-49f4-0139-c22f-00505690f91e</directory_server_id>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv2 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('01')
        ->setMpiCavv('kFOImea0C/2ta1NZl4Hhwslmomqj')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5d919fe0-49f4-0139-c22f-00505690f91e');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"01", "cavv"=>"kFOImea0C/2ta1NZl4Hhwslmomqj", "protocol_version"=>"2", "directory_server_id"=>"5d919fe0-49f4-0139-c22f-00505690f91e"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "01",
      "cavv": "kFOImea0C/2ta1NZl4Hhwslmomqj",
      "protocol_version": "2",
      "directory_server_id": "5d919fe0-49f4-0139-c22f-00505690f91e"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>01</eci>
      <cavv>kFOImea0C/2ta1NZl4Hhwslmomqj</cavv>
      <protocol_version>2</protocol_version>
      <directory_server_id>5d919fe0-49f4-0139-c22f-00505690f91e</directory_server_id>
    </mpi_params>
  </payment_transaction>'
```

Master Synchronous 3 D Sv2 Acquirer Exemption Accepted (Tra Already Performed) Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5169750000001111')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('06')
        ->setMpiCavv('kNMAAAAA3S13awBkrWtTWZeBBCmy')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5d99b4b0-49f4-0139-c22f-00505690f91e')


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5169750000001111");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"06", "cavv"=>"kNMAAAAA3S13awBkrWtTWZeBBCmy", "protocol_version"=>"2", "directory_server_id"=>"5d99b4b0-49f4-0139-c22f-00505690f91e"}");


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5169750000001111",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "06",
      "cavv": "kNMAAAAA3S13awBkrWtTWZeBBCmy",
      "protocol_version": "2",
      "directory_server_id": "5d99b4b0-49f4-0139-c22f-00505690f91e"
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>authorize3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>5169750000001111</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>06</eci>
     <cavv>kNMAAAAA3S13awBkrWtTWZeBBCmy</cavv>
     <protocol_version>2</protocol_version>
     <directory_server_id>5d99b4b0-49f4-0139-c22f-00505690f91e</directory_server_id>
   </mpi_params>
   <sca_params>
     <exemption>low_risk</exemption>
   </sca_params>
 </payment_transaction>'
```

Asynchronous 3 D Sv2 Frictionless No 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4012000000060085')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4012000000060085");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4012000000060085",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4012000000060085</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Asynchronous 3 D Sv2 Frictionless With 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4066330000000004')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4066330000000004");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4066330000000004",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4066330000000004</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Asynchronous 3 D Sv2 Challenge No 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4918190000000002')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"="https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"="browser", "challenge_window_size"="full_screen", "challenge_indicator"="preference"}')
        ->setThreedsPurchase('{"category"="service"}')
        ->setThreedsRecurring('{"expiration_date"="05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"="verified_address", "delivery_timeframe"="electronic", "reorder_items_indicator"="reordered", "pre_order_purchase_indicator"="merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"="05-02-2020", "update_indicator"="more_than_60days", "last_change_date"="05-11-2020", "password_change_indicator"="no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"="*/*", "java_enabled"="false", "language"="en-GB", "color_depth"="24", "screen_height"="900", "screen_width"="1440", "time_zone_offset"="-120", "user_agent"
        ->setThreedsSdk('{"interface"="native", "ui_types"={"ui_type"="multi_select"}, "application_id"="fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"="encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4918190000000002");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4918190000000002",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4918190000000002</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Asynchronous 3 D Sv2 Challenge With 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4938730000000001')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4938730000000001");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4938730000000001",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4938730000000001</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Asynchronous 3 D Sv2 Fallback No 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4901170000000003')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"="https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"="browser", "challenge_window_size"="full_screen", "challenge_indicator"="preference"}')
        ->setThreedsPurchase('{"category"="service"}')
        ->setThreedsRecurring('{"expiration_date"="05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"="verified_address", "delivery_timeframe"="electronic", "reorder_items_indicator"="reordered", "pre_order_purchase_indicator"="merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"="05-02-2020", "update_indicator"="more_than_60days", "last_change_date"="05-11-2020", "password_change_indicator"="no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"="*/*", "java_enabled"="false", "language"="en-GB", "color_depth"="24", "screen_height"="900", "screen_width"="1440", "time_zone_offset"="-120", "user_agent"
        ->setThreedsSdk('{"interface"="native", "ui_types"={"ui_type"="multi_select"}, "application_id"="fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"="encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4901170000000003");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4901170000000003",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4901170000000003</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Asynchronous 3 D Sv2 Fallback With 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4901164281364345')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"="https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"="browser", "challenge_window_size"="full_screen", "challenge_indicator"="preference"}')
        ->setThreedsPurchase('{"category"="service"}')
        ->setThreedsRecurring('{"expiration_date"="05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"="verified_address", "delivery_timeframe"="electronic", "reorder_items_indicator"="reordered", "pre_order_purchase_indicator"="merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"="05-02-2020", "update_indicator"="more_than_60days", "last_change_date"="05-11-2020", "password_change_indicator"="no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"="*/*", "java_enabled"="false", "language"="en-GB", "color_depth"="24", "screen_height"="900", "screen_width"="1440", "time_zone_offset"="-120", "user_agent"
        ->setThreedsSdk('{"interface"="native", "ui_types"={"ui_type"="multi_select"}, "application_id"="fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"="encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4901164281364345");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4901164281364345",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4901164281364345</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **authorize3d**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
gaming	optional	"true"	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contact tech-support@e-comprocessing.com for more details
preauthorization	optional	"true"	Signifies whether a preauthorization transaction is performed. Check the Preauthorizations section or contact tech support for more details.
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
crypto	optional	"true"	Signifies whether a purchase of crypto-currency transaction is performed. Must be populated when purchasing crypto-currency with a VISA card and MCC is 6051. Must be populated when purchasing crypto-currency with a MASTER or INTL MAESTRO card and MCC is one of 6051, 6211. Contact tech-support@e-comprocessing.com for more details
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
notification_url	required[1]	url	URL at merchant where gateway sends outcome of transaction.
return_success_url	required[1]	url	URL where customer is sent to after successful payment
return_failure_url	required[1]	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_holder	required	string(45)	Full name of customer as printed on credit card (first name and last name at least). Note, for async 3DSv2 transactions, the card holder name must NOT contain more than **45** chars. Otherwise, the rest will be truncated in the authentication request.
card_number	required	13 to 16 digits	Complete cc number of customer
cvv	required	3 to 4 digits	cvv of cc, requirement is based on terminal configuration
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted. Cannot be set together with `remember_card`
remember_card	optional	"true"	See Tokenize. Tokenizes cardholder parameters. Cannot be set together with `token`
consumer_id	optional	string(10)	See Consumers and Tokenization. Combine with `remember_card` to tokenize or with `token` to use token
credential_on_file	required*		See Credential On File (COF) for more details
initial_customer_initiated	required*	string(18)	Initial transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
subsequent_customer_initiated	required*	string(18)	Subsequent transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
merchant_unscheduled	optional	string(20)	Transaction is initiated by the merchant
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(16)	Must contain a valid international phone number of the customer as per the**ITU-T E.164**. It's recommended to not submit a customer phone number containing more than **15** digits or less than **7** digits. Note, for async 3DS transactions that are using the 3DSv2 authentication protocol, it will be shortened up to **15** digits and a prefix **+** for international phone number will be added if missing.
birth_date	required*	dd-mm-yyyy	Required when MCC is a Financial Services one (e.g. MCC 6012) and either card brand is Visa or Mastercard/Maestro with UK-based merchant, UK-based bin (domestic), and DEBIT card type
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
fx_rate_id	optional	integer	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
business_attributes	required*		Check business attributes section.
event_start_date	required*	dd-mm-yyyy	The date when event starts in format dd-mm-yyyy
event_end_date	required*	dd-mm-yyyy	The date when event ends in format dd-mm-yyyy

Parameter	Required	Format	Description
event_organizer_id	required*	string	
event_id	required*	string	
date_of_order	required*	dd-mm-yyyy	The date when order was placed in format dd-mm-yyyy
delivery_date	required*	dd-mm-yyyy	Date of the expected delivery in format dd-mm-yyyy
name_of_the_supplier	required*	string	
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(150)	Primary address. The field length is limited to **150** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
address2	required*	string(255)	Secondary address
zip_code	required*	string(16)	The field that holds the zip code is limited to **16** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
city	required*	string(50)	The field that holds the city is limited to **50** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
state	required*	string(3)	The field that holds the country state is limited to **3** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol. Note: The value should be the country subdivision code defined in ISO 3166-2. Invalid values submitted NOT as per the ISO might lead to data integrity issues and fallback to 3DSv1 authentication protocol.
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(150)	Primary address. The field length is limited to **150** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
address2	optional	string(255)	Secondary address
zip_code	optional	string(16)	The field that holds the zip code is limited to **16** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
city	optional	string(50)	The field that holds the city is limited to **50** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
state	optional	string(3)	The field that holds the country state is limited to **3** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol. Note: The value should be the country subdivision code defined in ISO 3166-2. Invalid values submitted NOT as per the ISO might lead to data integrity issues and fallback to 3DSv1 authentication protocol.
country	optional	string(2)	Country code in ISO 3166
mpi_params	required[2]		
cavv	required[3]	string(255)	Verification Id of the authentication. Please note this can be the CAVV for Visa Card or UCAF to identify MasterCard.
eci	required[3]	string(255)	See Electronic Commerce Indicator as returned from the MPI for details
xid	required[3]	string(255)	Transaction ID generated by the 3DSv1 service that uniquely identifies the 3DSecure request. Note, it should not be submitted for transactions, which are though the 3DSv2 authentication protocol.
protocol_version	required[4]	string	The used 3DS protocol version. Default is 1 if not supplied.
directory_server_id	required[4]	string	The Directory Server ID used for 3DSecure transactions through the 3DSv2 authentication protocol.
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.
sca_params	optional		SCA params
exemption	optional	string	The exemption that the transaction should take advantage of. Note that the requested exemption may not be accepted due to internal risk validations.
visa_merchant_id	required[5]	string(8)	VMID assigned by Visa if participating in Trusted merchant program.

Parameter	Required	Format	Description
threeds_v2_params	required*		3DSv2 async parameters. They must be submitted in order to use the 3DSv2 authentication protocol in asynchronous workflow
threeds_method	optional		3DS-Method related parameters for any callbacks and notifications.
callback_url	optional	url	Specific 3DS-Method callback URL after the 3DS-Method completes. The actual status will be provided via HTTP POST to that URL. For more information, go to 3DSv2 method params
control	required*		General params for preferences in authentication flow and providing device interface information.
device_type	required*	string	Identifies the device channel of the consumer, **required** in the 3DSv2 authentication protocol. For more information, go to 3DSv2 control params
challenge_window_size	required*	string	Identifies the size of the challenge window for the consumer. For more information, go to3DSv2 control params
challenge_indicator	optional	string	The value has weight and might impact the decision whether a challenge will be required for the transaction or not. If not provided, it will be interpreted as **no_preference**. For more information, go to3DSv2 control params
purchase	optional		Purchase related params providing with additional information regarding the order.
category	optional	string	Identifies the type of transaction being authenticated. This field is required in some markets.Accepted values are: **goods**, **service**, **check_acceptance**, **account_funding**, **quasi_cash**, **prepaid_activation**, **loan**.
merchant_risk	recommended		Merchant risk assessment params. They are all optional, but recommended.
shipping_indicator	optional	string(16)	Indicator code that most accurately describes the shipping method for the cardholder specific transaction. If one or more items are included in the sale, use the Shipping Indicator code for the physical goods. If all digital goods, use the code that describes the most expensive item. Accepted values are: **same_as_billing**, **stored_address**, **verified_address**, **pick_up**, **digital_goods**, **travel**, **event_tickets**, **other**.
delivery_timeframe	optional	string(11)	Indicates the merchandise delivery timeframe. Accepted values are: **electronic**, **same_day**, **over_night**, **another_day**.
reorder_items_indicator	optional	string(10)	Indicates whether the cardholder is reordering previously purchased merchandise. Accepted values are: **first_time**, **reordered**.
pre_order_purchase_indicator	optional	string(21)	Indicates whether cardholder is placing an order for merchandise with a future-availability or release date. Accepted values are: **merchandise_available**, **future_availability**.
pre_order_date	optional	dd-mm-yyyy	For a pre-ordered purchase, the expected date that the merchandise will be available.
gift_card	optional	'true'	Prepaid or gift card purchase.
gift_card_count	optional	integer	For prepaid or gift card purchase, total count of individual prepaid or gift cards/codes purchased. The value is limited to **99**.
card_holder_account	recommended		Cardholder account additional information. They are all optional, but recommended, because they have a significant impact on approval rates
creation_date	optional	dd-mm-yyyy	Date that the cardholder opened the account with the 3DS Requester.
update_indicator	optional	string(19)	Length of time since the cardholder's account information with the 3DS Requestor was last changed. Includes Billing or Shipping address, new payment account, or new user(s) added. Accepted values are: **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
last_change_date	optional	dd-mm-yyyy	Date that the cardholder's account with the 3DS Requestor was last changed. Including Billing or Shipping address, new payment accout, or new user(s) added.
password_change_indicator	optional	string(18)	Length of time since the cardholder account with the 3DS Requestor had a password change or account reset. Accepted values are: **no_change**, **during_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
password_change_date	optional	dd-mm-yyyy	Date that cardholder's account with the 3DS Requestor had a password change or account reset.
shipping_address_usage_indicator	optional	string(19)	Indicates when the shipping address used for this transaction was first used with the 3DS Requestor. Accepted values are: **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
shipping_address_date_first_used	optional	dd-mm-yyyy	Date when the shipping address used for this transaction was first used with the 3DS Requestor.
transactions_activity_last_24_hours	optional	integer	Number of transactions (successful and abandoned) for this cardholder account with the 3DS Requestor across all payment accounts in the previous 24 hours.
transactions_activity_previous_year	optional	integer	Number of transactions (successful and abandoned) for this cardholder account with the 3DS Requestor across all payment accounts in the previous year.
provision_attempts_last_24_hours	optional	integer	Number of Add Card attempts in the last 24 hours.
purchases_count_last_6_months	optional	integer	Number of purchases with this cardholder account during the previous six months.
suspicious_activity_indicator	optional	string(22)	Indicates whether the 3DS Requestor has experienced suspicious activity (including previous fraud) on the cardholder account. Accepted values are: **no_suspicious_observed**, **suspicious_observed**.
registration_indicator	optional	string(19)	Indicates the length of time that the payment account was enrolled in the cardholder's account with the 3DS Requester. Accepted values are: **guest_checkout**, **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
registration_date	optional	dd-mm-yyyy	Date that the payment account was enrolled in the cardholder's account with the 3DS Requestor.

Parameter	Required	Format	Description
browser	required*		For browser-based transactions. They are all *required* in case the **device_type** is set to **browser**
accept_header	required*	string(2048)	The exact content of the HTTP **ACCEPT** header as sent to the 3DS Requester from the Cardholder browser. Any other header different than the **ACCEPT** header will be rejected. Example: `application/json,text/plain,text/html,*/*`.
java_enabled	required*	boolean	Boolean that represents the ability of the cardholder browser to execute Java. The value can be retrieved by accessing a property of the navigator with JavaScript, `navigator.javaEnabled`.
language	required*	string(8)	Value representing the browser language as defined in IETF BCP47. Note that only one browser language tag is about to be submitted as per the above **IETF BCP47**. Numeric chars are also allowed in the subtag and will represent the region.Example: `en-GB`, `zh-guoyu`, `fil-PH`, `gsw`, `es-419`, `de-1996`, etc. The value can be retrieved by accessing a property of the navigator with JavaScript, `navigator.language`.
color_depth	required*	integer	Value representing the bit depth of the colour palette for displaying images, in bits per pixel. Obtained from Cardholder browser using the `screen.colorDepth` property. The value as per EMVCo specs can be one of **1**, **4**, **8**, **15**, **16**, **24**, **32**, **48**. In case, an unsupported `color_depth` is determined, the nearest supported value that is less than the actual one needs to be submitted. For example, if the obtained value is **30**, which is not supported as per EMVCo specs, **24** has to be submitted.
screen_height	required*	integer	Total height of the Cardholder's screen in pixels. Value is returned from the screen.height property.
screen_width	required*	integer	Total width of the Cardholder's screen in pixels. Value is returned from the screen.width property.
time_zone_offset	required*	string(5)	Time difference between UTC time and the Cardholder browser local time, in **minutes**. Note that the offset is positive if the local time zone is behind UTC and negative if it is ahead. If **UTC -5** hours then submit `300` or `+300`, If **UTC +2** hours then `-120`. The value can be retrieved using Javascript `getTimezoneOffset()` method over **Date** object.
user_agent	required*	string(2048)	Exact content of the HTTP user-agent header.
sdk	required*		For application-based transactions. They are all *required* in case the **device_type** is set to **application**
interface	required*	string(6)	SDK Interface types that the device of the consumer supports for displaying specific challenge interfaces within the SDK. Accepted values are: **native**, **html**, **both**.
ui_types	required*		Lists all UI types that the device of the consumer supports for displaying specific challenge interfaces within the SDK.
ui_type	required*	string(13)	UI type that the device of the consumer supports for displaying specific challenge interface. Accepted values are: **text**, **single_select**, **multi_select**, **out_of_bag**, **other_html**.
application_id	required*	string(36)	Universally unique ID created upon all installations and updates of the 3DS Requestor APp on a Customer Device. This will be newly generated and stored by the 3DS SDK for each installation or update. The field is limited to 36 characters and it shall have a canonical format as defined in IETF RFC 4122.
encrypted_data	required*	string(64000)	JWE Object as defined Section 6.2.2.1 containing data encrypted by the SDK for the DS to decrypt. The data will be present when sending to DS, but not present from DS to ACS.
ephemeral_public_key_pair	required*	string(256)	Public key component of the ephemeral key pair generated by the 3DS SDK and used to establish session keys between the 3DS SDK and ACS. In AReq, this data element is contained within the ACS Signed Content JWS Object. The field is limited to maximum 256 characters.
max_timeout	required*	integer	Indicates the maximum amount of time (in minutes) for all exchanges. The field shall have value greater or equals than 05.
reference_number	required*	string(32)	Identifies the vendor and version of the 3DS SDK that is integrated in a 3DS Requestor App, assigned by EMVCo when the 3DS SDK is approved. The field is limited to 32 characters.

`required* = conditionally required`

`1 - required if mpi_params is not present, the transaction will be handled asynchronously. Not required if configured on Terminal or Merchant level. Contact [tech-support@#{email_domain_name}](mailto:tech-support@#{email_domain_name}) for more details.`

`2 - required if transaction should be handled synchronous.`

`3 - eci is always required if mpi_params is present. xid and cavv are not required for the 3D attempted only workflow, where the merchant does not have the xid/cavv, only the eci.`

`4 - protocol_version is only required if 3DSv2 is used. When missing 3DSv1 will be used. directory_server_id is mandatory when protocol_version is 2.`

`5 - visa_merchant_id is required when exemption value is trusted_merchant.`

Successful Synchronous Response

```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [cvv_result_code] => M
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:56.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
    [partial_approval] => false
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <cvv_result_code content=[M]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <timestamp content=[2021-02-04T15:25:56Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
    <partial_approval content=[false]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```
{
    transaction_type: "authorize3d",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    cvv_result_code: "M",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    timestamp: "2021-02-04T15:25:56Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
    partial_approval: "false",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <cvv_result_code>M</cvv_result_code>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:25:56Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
  <partial_approval>false</partial_approval>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_transaction>
```


Successful Asynchronous Response


```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v1_payer_authentication
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:56.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v1_payer_authentication]>
    <timestamp content=[2021-02-04T15:25:56Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "authorize3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v1_payer_authentication",
    timestamp: "2021-02-04T15:25:56Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v1_payer_authentication</redirect_url_type>
  <timestamp>2021-02-04T15:25:56Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Frictionless / Challenge / Fallback With 3 Ds Method Response


```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [threeds_method_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method
    [threeds_method_continue_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:57.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <threeds_method_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method]>
    <threeds_method_continue_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48]>
    <timestamp content=[2021-02-04T15:25:57Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "authorize3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    threeds_method_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method",
    threeds_method_continue_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48",
    timestamp: "2021-02-04T15:25:57Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <threeds_method_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method</threeds_method_url>
  <threeds_method_continue_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48</threeds_method_continue_url>
  <timestamp>2021-02-04T15:25:57Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Challenge Without 3 Ds Method Response


```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v2_challenge
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:57.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v2_challenge]>
    <timestamp content=[2021-02-04T15:25:57Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "authorize3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v2_challenge",
    timestamp: "2021-02-04T15:25:57Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v2_challenge</redirect_url_type>
  <timestamp>2021-02-04T15:25:57Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Fallback To 3 D Sv1 Without 3 Ds Method Response


```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v1_payer_authentication
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:57.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v1_payer_authentication]>
    <timestamp content=[2021-02-04T15:25:57Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "authorize3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v1_payer_authentication",
    timestamp: "2021-02-04T15:25:57Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v1_payer_authentication</redirect_url_type>
  <timestamp>2021-02-04T15:25:57Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
consumer_id	string(10)	Consumer unique reference. See Consumers
token	string(36)	Plain-text token value. See Tokenization
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where the consumer has to be redirected to complete the payment process unless a 3DSecure Method is required. This **redirect_url** will not be included in the response if a 3DS-Method submission is required. For more information, to go 3DSv2 authentication flows
redirect_url_type	string(64)	The type of the redirect URL in the 3DS scope. It will be present only for asynchronous 3D transactions when an interaction between consumer and issuer is required. This type identifies what kind of redirect url is returned, 3DSv2 Challenge or 3DSv1 Payer Authentication. For more information, to go 3DSv2 authentication flows
threeds_method_url	url	3DSecure Method URL. It will be present only then 3DS-Method is required for 3D transaction. A 3DS-Method submission inside an iframe is required to be submitted using HTTP POST. For more information, to go 3DSv2 authentication flows
threeds_method_continue_url	url	This is an API endpoint that accepts HTTP PUT & HTTP PATCH requests. It will be present when the **threeds_method_url** is included in the response. An HTTP PUT request must be submitted to that endpoint together with the proper signature to determine what the next step in the authentication is. For more information, to go 3DSv2 authentication flows
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.
scheme_transaction_identifier	string(32)	Id defined by card schemes. Corresponds to NETWORK DATA (field 63) for MasterCard or TRANS ID (field 62.2/125) for VISA.

Parameter	Type	Description
scheme_settlement_date	string(4)	MasterCard settlement date in MMDD format (e.g. 0205). Corresponds to NETWORK DATA (field 15).

Error Response

```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] => 57
    [code] => 340
    [technical_message] => expiration_year is invalid
    [message] => expiration_year is invalid
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:57.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[57]>
    <code content=[340]>
    <technical_message content=[expiration_year is invalid]>
    <message content=[expiration_year is invalid]>
    <timestamp content=[2021-02-04T15:25:57Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "authorize3d",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "57",
    code: "340",
    technical_message: "expiration_year is invalid",
    message: "expiration_year is invalid",
    timestamp: "2021-02-04T15:25:57Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <response_code>57</response_code>
  <code>340</code>
  <technical_message>expiration_year is invalid</technical_message>
  <message>expiration_year is invalid</message>
  <timestamp>2021-02-04T15:25:57Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant

Parameter	Type	Description
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

SALE 3D

Sale3D transactions basically have the same request as standard sale transactions.

Sale3D transactions can be handled **synchronous** or **asynchronous** depending on the parameers passed. If mpi_params is passed the workflow will be **synchronous**. If **notification_url**, **return_success_url** and **return_failure_url** are passed the workflow will be **asynchronous**.

This transaction type supports Tokenization.

This transaction type supports Level 3 travel data.

This transaction type could require business attributes.

An exemption from Strong Customer Authentication (SCA) can be requested by submitting an **exemption** with `low_risk` under SCA params.

In case the issuer accepts the exemption, a step up in the authentication flow might not be required because the transaction's risk analysis has already been performed by acquirer.

Note, the requested exemption might not be accepted due to internal risk validations.

For example, to be able to utilize the low risk exemption, the BIN country of the card must be part of the European Economic Area (EEA).

Furthermore, the acquirer could accept the merchant low-risk exemption request only if the transaction amount does not exceed the acquirer low-risk exemption threshold.

Finally, the ACS might not acknowledge the merchant/acquirer's exemption request and may still require a step up in the cardholder authentication.

Visa Synchronous 3 D Sv1 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4711100000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('05')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiXid('0pv62FIrT5qQODB7DCewKgEBAQI=')
        ->setMpiProtocolVersion('1')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4711100000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"05", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "xid"=>"0pv62FIrT5qQODB7DCewKgEBAQI=", "protocol_version"=>"1"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4711100000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "05",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "xid": "0pv62FIrT5qQODB7DCewKgEBAQI=",
      "protocol_version": "1"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>sale3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4711100000000000</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>05</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <xid>0pv62FIrT5qQODB7DCewKgEBAQI=</xid>
     <protocol_version>1</protocol_version>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv1 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('02')
        ->setMpiCavv('jlk/+AMJkDARYwAAA2SqCUQAAAA=')
        ->setMpiXid('UVg1QThJU1FVV1hWWVQxQkxZNU8=')
        ->setMpiProtocolVersion('1');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"02", "cavv"=>"jlk/+AMJkDARYwAAA2SqCUQAAAA=", "xid"=>"UVg1QThJU1FVV1hWVQxQkxZNU8=", "protocol_version"=>"1"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "02",
      "cavv": "jlk/+AMJkDARYwAAA2SqCUQAAAA=",
      "xid": "UVg1QThJU1FVV1hWWVQxQkxZNU8=",
      "protocol_version": "1"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>02</eci>
      <cavv>jlk/+AMJkDARYwAAA2SqCUQAAAA=</cavv>
      <xid>UVg1QThJU1FVV1hWWVQxQkxZNU8=</xid>
      <protocol_version>1</protocol_version>
    </mpi_params>
  </payment_transaction>'
```

Visa Synchronous 3 D Sv1 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4711100000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('06')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiXid('0pv62FIrT5qQODB7DCewKgEBAQI=')
        ->setMpiProtocolVersion('1')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4711100000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"06", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "xid"=>"0pv62FIrT5qQODB7DCewKgEBAQI=", "protocol_version"=>"1"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4711100000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "06",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "xid": "0pv62FIrT5qQODB7DCewKgEBAQI=",
      "protocol_version": "1"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>sale3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4711100000000000</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>06</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <xid>0pv62FIrT5qQODB7DCewKgEBAQI=</xid>
     <protocol_version>1</protocol_version>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv1 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('01')
        ->setMpiCavv('hlk/+AMJkDARYwAAA2SqCUQAAAA=')
        ->setMpiXid('UVg1QThJU1FVV1hWWVQxQkxZNU8=')
        ->setMpiProtocolVersion('1');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"01", "cavv"=>"hlk/+AMJkDARYwAAA2SqCUQAAAA=", "xid"=>"UVg1QThJU1FVV1hWVQxQkxZNU8=", "protocol_version"=>"1"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "01",
      "cavv": "hlk/+AMJkDARYwAAA2SqCUQAAAA=",
      "xid": "UVg1QThJU1FVV1hWWVQxQkxZNU8=",
      "protocol_version": "1"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>01</eci>
      <cavv>hlk/+AMJkDARYwAAA2SqCUQAAAA=</cavv>
      <xid>UVg1QThJU1FVV1hWWVQxQkxZNU8=</xid>
      <protocol_version>1</protocol_version>
    </mpi_params>
  </payment_transaction>'
```

Asynchronous 3 D Sv1 Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure"
  }
).send()
  .then(success)
  .catch(failure);
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
  </payment_transaction>'
```

Visa Synchronous 3 D Sv2 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4012000000060085')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('05')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5e9912f0-49f4-0139-c22f-00505690f91e')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4012000000060085");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"05", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "protocol_version"=>"2", "directory_server_id"=>"5e9912f0-49f4-0139-c22f-00505690f91e"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4012000000060085",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "05",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "protocol_version": "2",
      "directory_server_id": "5e9912f0-49f4-0139-c22f-00505690f91e"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>sale3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4012000000060085</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>05</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <protocol_version>2</protocol_version>
     <directory_server_id>5e9912f0-49f4-0139-c22f-00505690f91e</directory_server_id>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv2 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('02')
        ->setMpiCavv('kAOImea0C/2ta1NZl4Hhwslmomqj')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5e9f2580-49f4-0139-c22f-00505690f91e');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"02", "cavv"=>"kAOImea0C/2ta1NZl4Hhwslmomqj", "protocol_version"=>"2", "directory_server_id"=>"5e9f2580-49f4-0139-c22f-00505690f91e"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "02",
      "cavv": "kAOImea0C/2ta1NZl4Hhwslmomqj",
      "protocol_version": "2",
      "directory_server_id": "5e9f2580-49f4-0139-c22f-00505690f91e"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>02</eci>
      <cavv>kAOImea0C/2ta1NZl4Hhwslmomqj</cavv>
      <protocol_version>2</protocol_version>
      <directory_server_id>5e9f2580-49f4-0139-c22f-00505690f91e</directory_server_id>
    </mpi_params>
  </payment_transaction>'
```

Visa Synchronous 3 D Sv2 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4012000000060085')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('06')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5ea474d0-49f4-0139-c22f-00505690f91e')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4012000000060085");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"06", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "protocol_version"=>"2", "directory_server_id"=>"5ea474d0-49f4-0139-c22f-00505690f91e"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4012000000060085",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "06",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "protocol_version": "2",
      "directory_server_id": "5ea474d0-49f4-0139-c22f-00505690f91e"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>sale3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4012000000060085</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>06</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <protocol_version>2</protocol_version>
     <directory_server_id>5ea474d0-49f4-0139-c22f-00505690f91e</directory_server_id>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv2 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('01')
        ->setMpiCavv('kEOImea0C/2ta1NZl4Hhwslmomqj')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5ea9e190-49f4-0139-c22f-00505690f91e');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"01", "cavv"=>"kEOImea0C/2ta1NZl4Hhwslmomqj", "protocol_version"=>"2", "directory_server_id"=>"5ea9e190-49f4-0139-c22f-00505690f91e"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "01",
      "cavv": "kEOImea0C/2ta1NZl4Hhwslmomqj",
      "protocol_version": "2",
      "directory_server_id": "5ea9e190-49f4-0139-c22f-00505690f91e"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>01</eci>
      <cavv>kEOImea0C/2ta1NZl4Hhwslmomqj</cavv>
      <protocol_version>2</protocol_version>
      <directory_server_id>5ea9e190-49f4-0139-c22f-00505690f91e</directory_server_id>
    </mpi_params>
  </payment_transaction>'
```

Master Synchronous 3 D Sv2 Acquirer Exemption Accepted (Tra Already Performed) Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5169750000001111')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('06')
        ->setMpiCavv('kNMAAAAA3S13awBkrWtTWZeBBCmy')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5eaf1e00-49f4-0139-c22f-00505690f91e')


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5169750000001111");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"06", "cavv"=>"kNMAAAAA3S13awBkrWtTWZeBBCmy", "protocol_version"=>"2", "directory_server_id"=>"5eaf1e00-49f4-0139-c22f-00505690f91e"}");


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5169750000001111",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "06",
      "cavv": "kNMAAAAA3S13awBkrWtTWZeBBCmy",
      "protocol_version": "2",
      "directory_server_id": "5eaf1e00-49f4-0139-c22f-00505690f91e"
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>sale3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>5169750000001111</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>06</eci>
     <cavv>kNMAAAAA3S13awBkrWtTWZeBBCmy</cavv>
     <protocol_version>2</protocol_version>
     <directory_server_id>5eaf1e00-49f4-0139-c22f-00505690f91e</directory_server_id>
   </mpi_params>
   <sca_params>
     <exemption>low_risk</exemption>
   </sca_params>
 </payment_transaction>'
```

Asynchronous 3 D Sv2 Frictionless No 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4012000000060085')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4012000000060085");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4012000000060085",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4012000000060085</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Asynchronous 3 D Sv2 Frictionless With 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4066330000000004')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"="https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"="browser", "challenge_window_size"="full_screen", "challenge_indicator"="preference"}')
        ->setThreedsPurchase('{"category"="service"}')
        ->setThreedsRecurring('{"expiration_date"="05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"="verified_address", "delivery_timeframe"="electronic", "reorder_items_indicator"="reordered", "pre_order_purchase_indicator"="merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"="05-02-2020", "update_indicator"="more_than_60days", "last_change_date"="05-11-2020", "password_change_indicator"="no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"="*/*", "java_enabled"="false", "language"="en-GB", "color_depth"="24", "screen_height"="900", "screen_width"="1440", "time_zone_offset"="-120", "user_agent"
        ->setThreedsSdk('{"interface"="native", "ui_types"={"ui_type"="multi_select"}, "application_id"="fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"="encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4066330000000004");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4066330000000004",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4066330000000004</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Asynchronous 3 D Sv2 Challenge No 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4918190000000002')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4918190000000002");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4918190000000002",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4918190000000002</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Asynchronous 3 D Sv2 Challenge With 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4938730000000001')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4938730000000001");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4938730000000001",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4938730000000001</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Asynchronous 3 D Sv2 Fallback No 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4901170000000003')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"="https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"="browser", "challenge_window_size"="full_screen", "challenge_indicator"="preference"}')
        ->setThreedsPurchase('{"category"="service"}')
        ->setThreedsRecurring('{"expiration_date"="05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"="verified_address", "delivery_timeframe"="electronic", "reorder_items_indicator"="reordered", "pre_order_purchase_indicator"="merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"="05-02-2020", "update_indicator"="more_than_60days", "last_change_date"="05-11-2020", "password_change_indicator"="no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"="*/*", "java_enabled"="false", "language"="en-GB", "color_depth"="24", "screen_height"="900", "screen_width"="1440", "time_zone_offset"="-120", "user_agent"
        ->setThreedsSdk('{"interface"="native", "ui_types"={"ui_type"="multi_select"}, "application_id"="fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"="encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4901170000000003");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4901170000000003",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4901170000000003</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Asynchronous 3 D Sv2 Fallback With 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4901164281364345')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"="https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"="browser", "challenge_window_size"="full_screen", "challenge_indicator"="preference"}')
        ->setThreedsPurchase('{"category"="service"}')
        ->setThreedsRecurring('{"expiration_date"="05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"="verified_address", "delivery_timeframe"="electronic", "reorder_items_indicator"="reordered", "pre_order_purchase_indicator"="merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"="05-02-2020", "update_indicator"="more_than_60days", "last_change_date"="05-11-2020", "password_change_indicator"="no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"="*/*", "java_enabled"="false", "language"="en-GB", "color_depth"="24", "screen_height"="900", "screen_width"="1440", "time_zone_offset"="-120", "user_agent"
        ->setThreedsSdk('{"interface"="native", "ui_types"={"ui_type"="multi_select"}, "application_id"="fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"="encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4901164281364345");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4901164281364345",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4901164281364345</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **sale3d**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
gaming	optional	"true"	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contact tech-support@e-comprocessing.com for more details
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
crypto	optional	"true"	Signifies whether a purchase of crypto-currency transaction is performed. Must be populated when purchasing crypto-currency with a VISA card and MCC is 6051. Must be populated when purchasing crypto-currency with a MASTER or INTL MAESTRO card and MCC is one of 6051, 6211. Contact tech-support@e-comprocessing.com for more details
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
notification_url	required[1]	url	URL at merchant where gateway sends outcome of transaction.
return_success_url	required[1]	url	URL where customer is sent to after successful payment
return_failure_url	required[1]	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_holder	required	string(45)	Full name of customer as printed on credit card (first name and last name at least). Note, for async 3DSv2 transactions, the card holder name must NOT contain more than **45** chars. Otherwise, the rest will be truncated in the authentication request.
card_number	required	13 to 16 digits	Complete cc number of customer
cvv	required	3 to 4 digits	cvv of cc, requirement is based on terminal configuration
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted. Cannot be set together with `remember_card`
remember_card	optional	"true"	See Tokenize. Tokenizes cardholder parameters. Cannot be set together with `token`
consumer_id	optional	string(10)	See Consumers and Tokenization. Combine with `remember_card` to tokenize or with `token` to use token
credential_on_file	required*		See Credential On File (COF) for more details
initial_customer_initiated	required*	string(18)	Initial transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
subsequent_customer_initiated	required*	string(18)	Subsequent transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
merchant_unscheduled	optional	string(20)	Transaction is initiated by the merchant
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(16)	Must contain a valid international phone number of the customer as per the**ITU-T E.164**. It's recommended to not submit a customer phone number containing more than **15** digits or less than **7** digits. Note, for async 3DS transactions that are using the 3DSv2 authentication protocol, it will be shortened up to **15** digits and a prefix **+** for international phone number will be added if missing.
birth_date	required*	dd-mm-yyyy	Required when MCC is a Financial Services one (e.g. MCC 6012) and either card brand is Visa or Mastercard/Maestro with UK-based merchant, UK-based bin (domestic), and DEBIT card type
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
fx_rate_id	optional	integer	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
business_attributes	required*		Check business attributes section.
event_start_date	required*	dd-mm-yyyy	The date when event starts in format dd-mm-yyyy
event_end_date	required*	dd-mm-yyyy	The date when event ends in format dd-mm-yyyy
event_organizer_id	required*	string	
event_id	required*	string	

Parameter	Required	Format	Description
date_of_order	required*	dd-mm-yyyy	The date when order was placed in format dd-mm-yyyy
delivery_date	required*	dd-mm-yyyy	Date of the expected delivery in format dd-mm-yyyy
name_of_the_supplier	required*	string	
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(150)	Primary address. The field length is limited to **150** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
address2	required*	string(255)	Secondary address
zip_code	required*	string(16)	The field that holds the zip code is limited to **16** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
city	required*	string(50)	The field that holds the city is limited to **50** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
state	required*	string(3)	The field that holds the country state is limited to **3** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol. Note: The value should be the country subdivision code defined in ISO 3166-2. Invalid values submitted NOT as per the ISO might lead to data integrity issues and fallback to 3DSv1 authentication protocol.
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(150)	Primary address. The field length is limited to **150** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
address2	optional	string(255)	Secondary address
zip_code	optional	string(16)	The field that holds the zip code is limited to **16** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
city	optional	string(50)	The field that holds the city is limited to **50** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
state	optional	string(3)	The field that holds the country state is limited to **3** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol. Note: The value should be the country subdivision code defined in ISO 3166-2. Invalid values submitted NOT as per the ISO might lead to data integrity issues and fallback to 3DSv1 authentication protocol.
country	optional	string(2)	Country code in ISO 3166
mpi_params	required[2]		
cavv	required[3]	string(255)	Verification Id of the authentication. Please note this can be the CAVV for Visa Card or UCAF to identify MasterCard.
eci	required[3]	string(255)	See Electronic Commerce Indicator as returned from the MPI for details
xid	required[3]	string(255)	Transaction ID generated by the 3DSv1 service that uniquely identifies the 3DSecure request. Note, it should not be submitted for transactions, which are though the 3DSv2 authentication protocol.
protocol_version	required[4]	string	The used 3DS protocol version. Default is 1 if not supplied.
directory_server_id	required[4]	string	The Directory Server ID used for 3DSecure transactions through the 3DSv2 authentication protocol.
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.
sca_params	optional		SCA params
exemption	optional	string	The exemption that the transaction should take advantage of. Note that the requested exemption may not be accepted due to internal risk validations.
visa_merchant_id	required[5]	string(8)	VMID assigned by Visa if participating in Trusted merchant program.
threeds_v2_params	required*		3DSv2 async parameters. They must be submitted in order to use the 3DSv2 authentication protocol in asynchronous workflow
threeds_method	optional		3DS-Method related parameters for any callbacks and notifications.

Parameter	Required	Format	Description
callback_url	optional	url	Specific 3DS-Method callback URL after the 3DS-Method completes. The actual status will be provided via HTTP POST to that URL. For more information, go to 3DSv2 method params
control	required*		General params for preferences in authentication flow and providing device interface information.
device_type	required*	string	Identifies the device channel of the consumer, **required** in the 3DSv2 authentication protocol. For more information, go to 3DSv2 control params
challenge_window_size	required*	string	Identifies the size of the challenge window for the consumer. For more information, go to3DSv2 control params
challenge_indicator	optional	string	The value has weight and might impact the decision whether a challenge will be required for the transaction or not. If not provided, it will be interpreted as **no_preference**. For more information, go to3DSv2 control params
purchase	optional		Purchase related params providing with additional information regarding the order.
category	optional	string	Identifies the type of transaction being authenticated. This field is required in some markets.Accepted values are: **goods**, **service**, **check_acceptance**, **account_funding**, **quasi_cash**, **prepaid_activation**, **loan**.
merchant_risk	recommended		Merchant risk assessment params. They are all optional, but recommended.
shipping_indicator	optional	string(16)	Indicator code that most accurately describes the shipping method for the cardholder specific transaction. If one or more items are included in the sale, use the Shipping Indicator code for the physical goods. If all digital goods, use the code that describes the most expensive item. Accepted values are: **same_as_billing**, **stored_address**, **verified_address**, **pick_up**, **digital_goods**, **travel**, **event_tickets**, **other**.
delivery_timeframe	optional	string(11)	Indicates the merchandise delivery timeframe. Accepted values are: **electronic**, **same_day**, **over_night**, **another_day**.
reorder_items_indicator	optional	string(10)	Indicates whether the cardholder is reordering previously purchased merchandise. Accepted values are: **first_time**, **reordered**.
pre_order_purchase_indicator	optional	string(21)	Indicates whether cardholder is placing an order for merchandise with a future-availability or release date. Accepted values are: **merchandise_available**, **future_availability**.
pre_order_date	optional	dd-mm-yyyy	For a pre-ordered purchase, the expected date that the merchandise will be available.
gift_card	optional	'true'	Prepaid or gift card purchase.
gift_card_count	optional	integer	For prepaid or gift card purchase, total count of individual prepaid or gift cards/codes purchased. The value is limited to **99**.
card_holder_account	recommended		Cardholder account additional information. They are all optional, but recommended, because they have a significant impact on approval rates
creation_date	optional	dd-mm-yyyy	Date that the cardholder opened the account with the 3DS Requester.
update_indicator	optional	string(19)	Length of time since the cardholder's account information with the 3DS Requestor was last changed. Includes Billing or Shipping address, new payment account, or new user(s) added. Accepted values are: **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
last_change_date	optional	dd-mm-yyyy	Date that the cardholder's account with the 3DS Requestor was last changed. Including Billing or Shipping address, new payment accout, or new user(s) added.
password_change_indicator	optional	string(18)	Length of time since the cardholder account with the 3DS Requestor had a password change or account reset. Accepted values are: **no_change**, **during_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
password_change_date	optional	dd-mm-yyyy	Date that cardholder's account with the 3DS Requestor had a password change or account reset.
shipping_address_usage_indicator	optional	string(19)	Indicates when the shipping address used for this transaction was first used with the 3DS Requestor. Accepted values are: **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
shipping_address_date_first_used	optional	dd-mm-yyyy	Date when the shipping address used for this transaction was first used with the 3DS Requestor.
transactions_activity_last_24_hours	optional	integer	Number of transactions (successful and abandoned) for this cardholder account with the 3DS Requestor across all payment accounts in the previous 24 hours.
transactions_activity_previous_year	optional	integer	Number of transactions (successful and abandoned) for this cardholder account with the 3DS Requestor across all payment accounts in the previous year.
provision_attempts_last_24_hours	optional	integer	Number of Add Card attempts in the last 24 hours.
purchases_count_last_6_months	optional	integer	Number of purchases with this cardholder account during the previous six months.
suspicious_activity_indicator	optional	string(22)	Indicates whether the 3DS Requestor has experienced suspicious activity (including previous fraud) on the cardholder account. Accepted values are: **no_suspicious_observed**, **suspicious_observed**.
registration_indicator	optional	string(19)	Indicates the length of time that the payment account was enrolled in the cardholder's account with the 3DS Requester. Accepted values are: **guest_checkout**, **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
registration_date	optional	dd-mm-yyyy	Date that the payment account was enrolled in the cardholder's account with the 3DS Requestor.
browser	required*		For browser-based transactions. They are all *required* in case the **device_type** is set to **browser**

Parameter	Required	Format	Description
accept_header	required*	string(2048)	The exact content of the HTTP **ACCEPT** header as sent to the 3DS Requester from the Cardholder browser. Any other header different than the **ACCEPT** header will be rejected. Example: `application/json,text/plain,text/html,*/*`.
java_enabled	required*	boolean	Boolean that represents the ability of the cardholder browser to execute Java. The value can be retrieved by accessing a property of the navigator with JavaScript, `navigator.javaEnabled`.
language	required*	string(8)	Value representing the browser language as defined in IETF BCP47. Note that only one browser language tag is about to be submitted as per the above **IETF BCP47**. Numeric chars are also allowed in the subtag and will represent the region.Example: `en-GB`, `zh-guoyu`, `fil-PH`, `gsw`, `es-419`, `de-1996`, etc. The value can be retrieved by accessing a property of the navigator with JavaScript, `navigator.language`.
color_depth	required*	integer	Value representing the bit depth of the colour palette for displaying images, in bits per pixel. Obtained from Cardholder browser using the `screen.colorDepth` property. The value as per EMVCo specs can be one of **1**, **4**, **8**, **15**, **16**, **24**, **32**, **48**. In case, an unsupported `color_depth` is determined, the nearest supported value that is less than the actual one needs to be submitted. For example, if the obtained value is **30**, which is not supported as per EMVCo specs, **24** has to be submitted.
screen_height	required*	integer	Total height of the Cardholder's screen in pixels. Value is returned from the screen.height property.
screen_width	required*	integer	Total width of the Cardholder's screen in pixels. Value is returned from the screen.width property.
time_zone_offset	required*	string(5)	Time difference between UTC time and the Cardholder browser local time, in **minutes**. Note that the offset is positive if the local time zone is behind UTC and negative if it is ahead. If **UTC -5** hours then submit `300` or `+300`, If **UTC +2** hours then `-120`. The value can be retrieved using Javascript `getTimezoneOffset()` method over **Date** object.
user_agent	required*	string(2048)	Exact content of the HTTP user-agent header.
sdk	required*		For application-based transactions. They are all *required* in case the **device_type** is set to **application**
interface	required*	string(6)	SDK Interface types that the device of the consumer supports for displaying specific challenge interfaces within the SDK. Accepted values are: **native**, **html**, **both**.
ui_types	required*		Lists all UI types that the device of the consumer supports for displaying specific challenge interfaces within the SDK.
ui_type	required*	string(13)	UI type that the device of the consumer supports for displaying specific challenge interface. Accepted values are: **text**, **single_select**, **multi_select**, **out_of_bag**, **other_html**.
application_id	required*	string(36)	Universally unique ID created upon all installations and updates of the 3DS Requestor APp on a Customer Device. This will be newly generated and stored by the 3DS SDK for each installation or update. The field is limited to 36 characters and it shall have a canonical format as defined in IETF RFC 4122.
encrypted_data	required*	string(64000)	JWE Object as defined Section 6.2.2.1 containing data encrypted by the SDK for the DS to decrypt. The data will be present when sending to DS, but not present from DS to ACS.
ephemeral_public_key_pair	required*	string(256)	Public key component of the ephemeral key pair generated by the 3DS SDK and used to establish session keys between the 3DS SDK and ACS. In AReq, this data element is contained within the ACS Signed Content JWS Object. The field is limited to maximum 256 characters.
max_timeout	required*	integer	Indicates the maximum amount of time (in minutes) for all exchanges. The field shall have value greater or equals than 05.
reference_number	required*	string(32)	Identifies the vendor and version of the 3DS SDK that is integrated in a 3DS Requestor App, assigned by EMVCo when the 3DS SDK is approved. The field is limited to 32 characters.

`required* = conditionally required`

`1 - required if mpi_params is not present, the transaction will be handled asynchronously. Not required if configured on Terminal or Merchant level. Contact [tech-support@#{email_domain_name}](mailto:tech-support@#{email_domain_name}) for more details.`

`2 - required if transaction should be handled synchronous.`

`3 - eci is always required if mpi_params is present. xid and cavv are not required for the 3D attempted only workflow, where the merchant does not have the xid/cavv, only the eci.`

`4 - protocol_version is only required if 3DSv2 is used. When missing 3DSv1 will be used. directory_server_id is mandatory when protocol_version is 2.`

`5 - visa_merchant_id is required when exemption value is trusted_merchant.`

Successful Synchronous Response

```
stdClass Object
(
    [transaction_type] => sale3d
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [cvv_result_code] => M
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:58.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
    [partial_approval] => false
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <cvv_result_code content=[M]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <timestamp content=[2021-02-04T15:25:58Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
    <partial_approval content=[false]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```
{
    transaction_type: "sale3d",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    cvv_result_code: "M",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    timestamp: "2021-02-04T15:25:58Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
    partial_approval: "false",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <cvv_result_code>M</cvv_result_code>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:25:58Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
  <partial_approval>false</partial_approval>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_transaction>
```


Successful Asynchronous Response


```
stdClass Object
(
    [transaction_type] => sale3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v1_payer_authentication
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:58.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v1_payer_authentication]>
    <timestamp content=[2021-02-04T15:25:58Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "sale3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v1_payer_authentication",
    timestamp: "2021-02-04T15:25:58Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v1_payer_authentication</redirect_url_type>
  <timestamp>2021-02-04T15:25:58Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Frictionless / Challenge / Fallback With 3 Ds Method Response


```
stdClass Object
(
    [transaction_type] => sale3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [threeds_method_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method
    [threeds_method_continue_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:58.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <threeds_method_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method]>
    <threeds_method_continue_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48]>
    <timestamp content=[2021-02-04T15:25:58Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "sale3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    threeds_method_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method",
    threeds_method_continue_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48",
    timestamp: "2021-02-04T15:25:58Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <threeds_method_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method</threeds_method_url>
  <threeds_method_continue_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48</threeds_method_continue_url>
  <timestamp>2021-02-04T15:25:58Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Challenge Without 3 Ds Method Response


```
stdClass Object
(
    [transaction_type] => sale3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v2_challenge
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:58.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v2_challenge]>
    <timestamp content=[2021-02-04T15:25:58Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "sale3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v2_challenge",
    timestamp: "2021-02-04T15:25:58Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v2_challenge</redirect_url_type>
  <timestamp>2021-02-04T15:25:58Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Fallback To 3 D Sv1 Without 3 Ds Method Response


```php
stdClass Object
(
    [transaction_type] => sale3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v1_payer_authentication
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:58.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```xml
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v1_payer_authentication]>
    <timestamp content=[2021-02-04T15:25:58Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```json
{
    transaction_type: "sale3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v1_payer_authentication",
    timestamp: "2021-02-04T15:25:58Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v1_payer_authentication</redirect_url_type>
  <timestamp>2021-02-04T15:25:58Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
consumer_id	string(10)	Consumer unique reference. See Consumers
token	string(36)	Plain-text token value. See Tokenization
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where the consumer has to be redirected to complete the payment process unless a 3DSecure Method is required. This **redirect_url** will not be included in the response if a 3DS-Method submission is required. For more information, to go 3DSv2 authentication flows
redirect_url_type	string(64)	The type of the redirect URL in the 3DS scope. It will be present only for asynchronous 3D transactions when an interaction between consumer and issuer is required. This type identifies what kind of redirect url is returned, 3DSv2 Challenge or 3DSv1 Payer Authentication. For more information, to go 3DSv2 authentication flows
threeds_method_url	url	3DSecure Method URL. It will be present only then 3DS-Method is required for 3D transaction. A 3DS-Method submission inside an iframe is required to be submitted using HTTP POST. For more information, to go 3DSv2 authentication flows
threeds_method_continue_url	url	This is an API endpoint that accepts HTTP PUT & HTTP PATCH requests. It will be present when the **threeds_method_url** is included in the response. An HTTP PUT request must be submitted to that endpoint together with the proper signature to determine what the next step in the authentication is. For more information, to go 3DSv2 authentication flows
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.
scheme_transaction_identifier	string(32)	Id defined by card schemes. Corresponds to NETWORK DATA (field 63) for MasterCard or TRANS ID (field 62.2/125) for VISA.

Parameter	Type	Description
scheme_settlement_date	string(4)	MasterCard settlement date in MMDD format (e.g. 0205). Corresponds to NETWORK DATA (field 15).

Error Response

```
stdClass Object
(
    [transaction_type] => sale3d
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] => 57
    [code] => 340
    [technical_message] => expiration_year is invalid
    [message] => expiration_year is invalid
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:58.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[57]>
    <code content=[340]>
    <technical_message content=[expiration_year is invalid]>
    <message content=[expiration_year is invalid]>
    <timestamp content=[2021-02-04T15:25:58Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "sale3d",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "57",
    code: "340",
    technical_message: "expiration_year is invalid",
    message: "expiration_year is invalid",
    timestamp: "2021-02-04T15:25:58Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <response_code>57</response_code>
  <code>340</code>
  <technical_message>expiration_year is invalid</technical_message>
  <message>expiration_year is invalid</message>
  <timestamp>2021-02-04T15:25:58Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant

Parameter	Type	Description
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

INIT RECURRING SALE 3D

InitRecurringSale3D transactions basically have the same request as standard InitRecurringSale transactions.

> InitRecurringSale3D transactions can be handled synchronous or asynchronous depending on the parameters passed. If mpi params is passed the workflow will be synchronous. If notification url, return success url and return failure url are passed the workflow will be asynchronous.

> This transaction type supports Tokenization.

> This transaction type supports Level 3 travel data.

> This transaction type could require business attributes.

> An exemption from Strong Customer Authentication (SCA) can be requested by submitting an **exemption** with `low_risk` under SCA params.
>
> In case the issuer accepts the exemption, a step up in the authentication flow might not be required because the transaction's risk analysis has already been performed by acquirer.
>
> Note, the requested exemption might not be accepted due to internal risk validations.
>
> For example, to be able to utilize the low risk exemption, the BIN country of the card must be part of the European Economic Area (EEA).
>
> Furthermore, the acquirer could accept the merchant low-risk exemption request only if the transaction amount does not exceed the acquirer low-risk exemption threshold.
>
> Finally, the ACS might not acknowledge the merchant/acquirer's exemption request and may still require a step up in the cardholder authentication.

Visa Synchronous 3 D Sv1 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4711100000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('05')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiXid('0pv62FIrT5qQODB7DCewKgEBAQI=')
        ->setMpiProtocolVersion('1')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4711100000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"05", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "xid"=>"0pv62FIrT5qQODB7DCewKgEBAQI=", "protocol_version"=>"1"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4711100000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "05",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "xid": "0pv62FIrT5qQODB7DCewKgEBAQI=",
      "protocol_version": "1"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>init_recurring_sale3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4711100000000000</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>05</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <xid>0pv62FIrT5qQODB7DCewKgEBAQI=</xid>
     <protocol_version>1</protocol_version>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv1 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('02')
        ->setMpiCavv('jlk/+AMJkDARYwAAA2SqCUQAAAA=')
        ->setMpiXid('UVg1QThJU1FVV1hWWVQxQkxZNU8=')
        ->setMpiProtocolVersion('1');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"02", "cavv"=>"jlk/+AMJkDARYwAAA2SqCUQAAAA=", "xid"=>"UVg1QThJU1FVV1hWVQxQkxZNU8=", "protocol_version"=>"1"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "02",
      "cavv": "jlk/+AMJkDARYwAAA2SqCUQAAAA=",
      "xid": "UVg1QThJU1FVV1hWWVQxQkxZNU8=",
      "protocol_version": "1"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>02</eci>
      <cavv>jlk/+AMJkDARYwAAA2SqCUQAAAA=</cavv>
      <xid>UVg1QThJU1FVV1hWWVQxQkxZNU8=</xid>
      <protocol_version>1</protocol_version>
    </mpi_params>
  </payment_transaction>'
```

Visa Synchronous 3 D Sv1 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4711100000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('06')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiXid('0pv62FIrT5qQODB7DCewKgEBAQI=')
        ->setMpiProtocolVersion('1')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4711100000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"06", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "xid"=>"0pv62FIrT5qQODB7DCewKgEBAQI=", "protocol_version"=>"1"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4711100000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "06",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "xid": "0pv62FIrT5qQODB7DCewKgEBAQI=",
      "protocol_version": "1"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4711100000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>06</eci>
      <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
      <xid>0pv62FIrT5qQODB7DCewKgEBAQI=</xid>
      <protocol_version>1</protocol_version>
    </mpi_params>
    <sca_params>
      <exemption>trusted_merchant</exemption>
      <visa_merchant_id>00000000</visa_merchant_id>
    </sca_params>
  </payment_transaction>'
```

Master Synchronous 3 D Sv1 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv1
        ->setMpiEci('01')
        ->setMpiCavv('hlk/+AMJkDARYwAAA2SqCUQAAAA=')
        ->setMpiXid('UVg1QThJU1FVV1hWWVQxQkxZNU8=')
        ->setMpiProtocolVersion('1');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V1
    request.setMpiParams("{"eci"=>"01", "cavv"=>"hlk/+AMJkDARYwAAA2SqCUQAAAA=", "xid"=>"UVg1QThJU1FVV1hWVQxQkxZNU8=", "protocol_version"=>"1"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "01",
      "cavv": "hlk/+AMJkDARYwAAA2SqCUQAAAA=",
      "xid": "UVg1QThJU1FVV1hWWVQxQkxZNU8=",
      "protocol_version": "1"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>01</eci>
      <cavv>hlk/+AMJkDARYwAAA2SqCUQAAAA=</cavv>
      <xid>UVg1QThJU1FVV1hWWVQxQkxZNU8=</xid>
      <protocol_version>1</protocol_version>
    </mpi_params>
  </payment_transaction>'
```

Asynchronous 3 D Sv1 Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
  </payment_transaction>'
```

Visa Synchronous 3 D Sv2 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4012000000060085')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('05')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5f4839e0-49f4-0139-c22f-00505690f91e')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4012000000060085");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"05", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "protocol_version"=>"2", "directory_server_id"=>"5f4839e0-49f4-0139-c22f-00505690f91e"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4012000000060085",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "05",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "protocol_version": "2",
      "directory_server_id": "5f4839e0-49f4-0139-c22f-00505690f91e"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>init_recurring_sale3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4012000000060085</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>05</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <protocol_version>2</protocol_version>
     <directory_server_id>5f4839e0-49f4-0139-c22f-00505690f91e</directory_server_id>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv2 Fully Authenticated Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('02')
        ->setMpiCavv('kBOImea0C/2ta1NZl4Hhwslmomqj')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5f4ced70-49f4-0139-c22f-00505690f91e');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"02", "cavv"=>"kBOImea0C/2ta1NZl4Hhwslmomqj", "protocol_version"=>"2", "directory_server_id"=>"5f4ced70-49f4-0139-c22f-00505690f91e"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "02",
      "cavv": "kBOImea0C/2ta1NZl4Hhwslmomqj",
      "protocol_version": "2",
      "directory_server_id": "5f4ced70-49f4-0139-c22f-00505690f91e"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>02</eci>
      <cavv>kBOImea0C/2ta1NZl4Hhwslmomqj</cavv>
      <protocol_version>2</protocol_version>
      <directory_server_id>5f4ced70-49f4-0139-c22f-00505690f91e</directory_server_id>
    </mpi_params>
  </payment_transaction>'
```

Visa Synchronous 3 D Sv2 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4012000000060085')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('06')
        ->setMpiCavv('MDAwMDAwMDAwMDAxMTA2Njk5NFg=')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5f51a480-49f4-0139-c22f-00505690f91e')


        // Sca Params
        ->setScaExemption('trusted_merchant')
        ->setScaVisaMerchantId('00000000');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4012000000060085");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"06", "cavv"=>"MDAwMDAwMDAwMDAxMTA2Njk5NFg=", "protocol_version"=>"2", "directory_server_id"=>"5f51a480-49f4-0139-c22f-00505690f91e"}");


    // Sca Params
    request.setScaExemption("trusted_merchant");
    request.setScaVisaMerchantId("00000000");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4012000000060085",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "06",
      "cavv": "MDAwMDAwMDAwMDAxMTA2Njk5NFg=",
      "protocol_version": "2",
      "directory_server_id": "5f51a480-49f4-0139-c22f-00505690f91e"
    },
    "sca_params": {
      "exemption": "trusted_merchant",
      "visa_merchant_id": "00000000"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>init_recurring_sale3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4012000000060085</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>06</eci>
     <cavv>MDAwMDAwMDAwMDAxMTA2Njk5NFg=</cavv>
     <protocol_version>2</protocol_version>
     <directory_server_id>5f51a480-49f4-0139-c22f-00505690f91e</directory_server_id>
   </mpi_params>
   <sca_params>
     <exemption>trusted_merchant</exemption>
     <visa_merchant_id>00000000</visa_merchant_id>
   </sca_params>
 </payment_transaction>'
```

Master Synchronous 3 D Sv2 Attempted Authentication Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555559997')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('01')
        ->setMpiCavv('kFOImea0C/2ta1NZl4Hhwslmomqj')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5f5756a0-49f4-0139-c22f-00505690f91e');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555559997");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"01", "cavv"=>"kFOImea0C/2ta1NZl4Hhwslmomqj", "protocol_version"=>"2", "directory_server_id"=>"5f5756a0-49f4-0139-c22f-00505690f91e"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555559997",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "01",
      "cavv": "kFOImea0C/2ta1NZl4Hhwslmomqj",
      "protocol_version": "2",
      "directory_server_id": "5f5756a0-49f4-0139-c22f-00505690f91e"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555559997</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <business_attributes>
      <event_start_date>05-03-2021</event_start_date>
      <event_end_date>17-03-2021</event_end_date>
      <event_organizer_id>20192375</event_organizer_id>
      <event_id>1912</event_id>
    </business_attributes>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <mpi_params>
      <eci>01</eci>
      <cavv>kFOImea0C/2ta1NZl4Hhwslmomqj</cavv>
      <protocol_version>2</protocol_version>
      <directory_server_id>5f5756a0-49f4-0139-c22f-00505690f91e</directory_server_id>
    </mpi_params>
  </payment_transaction>'
```

Master Synchronous 3 D Sv2 Acquirer Exemption Accepted (Tra Already Performed) Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5169750000001111')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Synchronous 3DSv2
        ->setMpiEci('06')
        ->setMpiCavv('kNMAAAAA3S13awBkrWtTWZeBBCmy')
        ->setMpiProtocolVersion('2')
        ->setMpiDirectoryServerId('5f5c07e0-49f4-0139-c22f-00505690f91e')


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5169750000001111");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Synchronous V2
    request.setMpiParams("{"eci"=>"06", "cavv"=>"kNMAAAAA3S13awBkrWtTWZeBBCmy", "protocol_version"=>"2", "directory_server_id"=>"5f5c07e0-49f4-0139-c22f-00505690f91e"}");


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "5169750000001111",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "business_attributes": {
      "event_start_date": "05-03-2021",
      "event_end_date": "17-03-2021",
      "event_organizer_id": "20192375",
      "event_id": "1912"
    },
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "mpi_params": {
      "eci": "06",
      "cavv": "kNMAAAAA3S13awBkrWtTWZeBBCmy",
      "protocol_version": "2",
      "directory_server_id": "5f5c07e0-49f4-0139-c22f-00505690f91e"
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>init_recurring_sale3d</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>5169750000001111</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <mpi_params>
     <eci>06</eci>
     <cavv>kNMAAAAA3S13awBkrWtTWZeBBCmy</cavv>
     <protocol_version>2</protocol_version>
     <directory_server_id>5f5c07e0-49f4-0139-c22f-00505690f91e</directory_server_id>
   </mpi_params>
   <sca_params>
     <exemption>low_risk</exemption>
   </sca_params>
 </payment_transaction>'
```

Asynchronous 3 D Sv2 Frictionless No 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4012000000060085')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4012000000060085");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4012000000060085",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
```

```
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4012000000060085</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <recurring>
      <expiration_date>05-08-2021</expiration_date>
      <frequency>30</frequency>
    </recurring>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```


Asynchronous 3 D Sv2 Frictionless With 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4066330000000004')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4066330000000004");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4066330000000004",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
```

```
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4066330000000004</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <recurring>
      <expiration_date>05-08-2021</expiration_date>
      <frequency>30</frequency>
    </recurring>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```


Asynchronous 3 D Sv2 Challenge No 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4918190000000002')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4918190000000002");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4918190000000002",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
```

```
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4918190000000002</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <recurring>
      <expiration_date>05-08-2021</expiration_date>
      <frequency>30</frequency>
    </recurring>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```


Asynchronous 3 D Sv2 Challenge With 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4938730000000001')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4938730000000001");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4938730000000001",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
```

```
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4938730000000001</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <recurring>
      <expiration_date>05-08-2021</expiration_date>
      <frequency>30</frequency>
    </recurring>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```


Asynchronous 3 D Sv2 Fallback No 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4901170000000003')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4901170000000003");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4901170000000003",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
```

```
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4901170000000003</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <recurring>
      <expiration_date>05-08-2021</expiration_date>
      <frequency>30</frequency>
    </recurring>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```


Asynchronous 3 D Sv2 Fallback With 3ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4901164281364345')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4901164281364345");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4901164281364345",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
```

```
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4901164281364345</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <recurring>
      <expiration_date>05-08-2021</expiration_date>
      <frequency>30</frequency>
    </recurring>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```


Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **init_recurring_sale3d**

Parameter	Required	Format	Description
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
notification_url	required[1]	url	URL at merchant where gateway sends outcome of transaction.
return_success_url	required[1]	url	URL where customer is sent to after successful payment
return_failure_url	required[1]	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_holder	required	string(45)	Full name of customer as printed on credit card (first name and last name at least). Note, for async 3DSv2 transactions, the card holder name must NOT contain more than **45** chars. Otherwise, the rest will be truncated in the authentication request.
card_number	required	13 to 16 digits	Complete cc number of customer
cvv	required*	3 to 4 digits	cvv of cc, requirement is based on terminal configuration
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted. Cannot be set together with `remember_card`
remember_card	optional	"true"	See Tokenize. Tokenizes cardholder parameters. Cannot be set together with `token`
consumer_id	optional	string(10)	See Consumers and Tokenization. Combine with `remember_card` to tokenize or with `token` to use token
credential_on_file	required*		See Credential On File (COF) for more details
initial_customer_initiated	required*	string(18)	Initial transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
subsequent_customer_initiated	required*	string(18)	Subsequent transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
merchant_unscheduled	optional	string(20)	Transaction is initiated by the merchant
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(16)	Must contain a valid international phone number of the customer as per the**ITU-T E.164**. It's recommended to not submit a customer phone number containing more than **15** digits or less than **7** digits. Note, for async 3DS transactions that are using the 3DSv2 authentication protocol, it will be shortened up to **15** digits and a prefix **+** for international phone number will be added if missing.
birth_date	required*	dd-mm-yyyy	Required when MCC is a Financial Services one (e.g. MCC 6012) and either card brand is Visa or Mastercard/Maestro with UK-based merchant, UK-based bin (domestic), and DEBIT card type
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
fx_rate_id	optional	integer	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
business_attributes	required*		Check business attributes section.
event_start_date	required*	dd-mm-yyyy	The date when event starts in format dd-mm-yyyy
event_end_date	required*	dd-mm-yyyy	The date when event ends in format dd-mm-yyyy
event_organizer_id	required*	string	
event_id	required*	string	
date_of_order	required*	dd-mm-yyyy	The date when order was placed in format dd-mm-yyyy
delivery_date	required*	dd-mm-yyyy	Date of the expected delivery in format dd-mm-yyyy
name_of_the_supplier	required*	string	
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name

Parameter	Required	Format	Description
last_name	required*	string(255)	Customer last name
address1	required*	string(150)	Primary address. The field length is limited to **150** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
address2	required*	string(255)	Secondary address
zip_code	required*	string(16)	The field that holds the zip code is limited to **16** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
city	required*	string(50)	The field that holds the city is limited to **50** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
state	required*	string(3)	The field that holds the country state is limited to **3** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol. Note: The value should be the country subdivision code defined in ISO 3166-2. Invalid values submitted NOT as per the ISO might lead to data integrity issues and fallback to 3DSv1 authentication protocol.
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(150)	Primary address. The field length is limited to **150** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
address2	optional	string(255)	Secondary address
zip_code	optional	string(16)	The field that holds the zip code is limited to **16** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
city	optional	string(50)	The field that holds the city is limited to **50** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol.
state	optional	string(3)	The field that holds the country state is limited to **3** chars only for async 3DS transactions that are using the 3DSv2 authentication protocol. Note: The value should be the country subdivision code defined in ISO 3166-2. Invalid values submitted NOT as per the ISO might lead to data integrity issues and fallback to 3DSv1 authentication protocol.
country	optional	string(2)	Country code in ISO 3166
mpi_params	required[2]		
cavv	required[3]	string(255)	Verification Id of the authentication. Please note this can be the CAVV for Visa Card or UCAF to identify MasterCard.
eci	required[3]	string(255)	See Electronic Commerce Indicator as returned from the MPI for details
xid	required[3]	string(255)	Transaction ID generated by the 3DSv1 service that uniquely identifies the 3DSecure request. Note, it should not be submitted for transactions, which are though the 3DSv2 authentication protocol.
protocol_version	required[4]	string	The used 3DS protocol version. Default is 1 if not supplied.
directory_server_id	required[4]	string	The Directory Server ID used for 3DSecure transactions through the 3DSv2 authentication protocol.
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.
sca_params	optional		SCA params
exemption	optional	string	The exemption that the transaction should take advantage of. Note that the requested exemption may not be accepted due to internal risk validations.
visa_merchant_id	required[5]	string(8)	VMID assigned by Visa if participating in Trusted merchant program.
threeds_v2_params	required*		3DSv2 async parameters. They must be submitted in order to use the 3DSv2 authentication protocol in asynchronous workflow
threeds_method	optional		3DS-Method related parameters for any callbacks and notifications.
callback_url	optional	url	Specific 3DS-Method callback URL after the 3DS-Method completes. The actual status will be provided via HTTP POST to that URL. For more information, go to 3DSv2 method params
control	required*		General params for preferences in authentication flow and providing device interface information.
device_type	required*	string	Identifies the device channel of the consumer, **required** in the 3DSv2 authentication protocol. For more information, go to 3DSv2 control params

Parameter	Required	Format	Description
challenge_window_size	required*	string	Identifies the size of the challenge window for the consumer. For more information, go to3DSv2 control params
challenge_indicator	optional	string	The value has weight and might impact the decision whether a challenge will be required for the transaction or not. If not provided, it will be interpreted as **no_preference**. For more information, go to3DSv2 control params
purchase	optional		Purchase related params providing with additional information regarding the order.
category	optional	string	Identifies the type of transaction being authenticated. This field is required in some markets.Accepted values are: **goods**, **service**, **check_acceptance**, **account_funding**, **quasi_cash**, **prepaid_activation**, **loan**.
merchant_risk	recommended		Merchant risk assessment params. They are all optional, but recommended.
shipping_indicator	optional	string(16)	Indicator code that most accurately describes the shipping method for the cardholder specific transaction. If one or more items are included in the sale, use the Shipping Indicator code for the physical goods. If all digital goods, use the code that describes the most expensive item. Accepted values are: **same_as_billing**, **stored_address**, **verified_address**, **pick_up**, **digital_goods**, **travel**, **event_tickets**, **other**.
delivery_timeframe	optional	string(11)	Indicates the merchandise delivery timeframe. Accepted values are: **electronic**, **same_day**, **over_night**, **another_day**.
reorder_items_indicator	optional	string(10)	Indicates whether the cardholder is reordering previously purchased merchandise. Accepted values are: **first_time**, **reordered**.
pre_order_purchase_indicator	optional	string(21)	Indicates whether cardholder is placing an order for merchandise with a future-availability or release date. Accepted values are: **merchandise_available**, **future_availability**.
pre_order_date	optional	dd-mm-yyyy	For a pre-ordered purchase, the expected date that the merchandise will be available.
gift_card	optional	'true'	Prepaid or gift card purchase.
gift_card_count	optional	integer	For prepaid or gift card purchase, total count of individual prepaid or gift cards/codes purchased. The value is limited to **99**.
card_holder_account	recommended		Cardholder account additional information. They are all optional, but recommended, because they have a significant impact on approval rates
creation_date	optional	dd-mm-yyyy	Date that the cardholder opened the account with the 3DS Requester.
update_indicator	optional	string(19)	Length of time since the cardholder's account information with the 3DS Requestor was last changed. Includes Billing or Shipping address, new payment account, or new user(s) added. Accepted values are: **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
last_change_date	optional	dd-mm-yyyy	Date that the cardholder's account with the 3DS Requestor was last changed. Including Billing or Shipping address, new payment accout, or new user(s) added.
password_change_indicator	optional	string(18)	Length of time since the cardholder account with the 3DS Requestor had a password change or account reset. Accepted values are: **no_change**, **during_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
password_change_date	optional	dd-mm-yyyy	Date that cardholder's account with the 3DS Requestor had a password change or account reset.
shipping_address_usage_indicator	optional	string(19)	Indicates when the shipping address used for this transaction was first used with the 3DS Requestor. Accepted values are: **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
shipping_address_date_first_used	optional	dd-mm-yyyy	Date when the shipping address used for this transaction was first used with the 3DS Requestor.
transactions_activity_last_24_hours	optional	integer	Number of transactions (successful and abandoned) for this cardholder account with the 3DS Requestor across all payment accounts in the previous 24 hours.
transactions_activity_previous_year	optional	integer	Number of transactions (successful and abandoned) for this cardholder account with the 3DS Requestor across all payment accounts in the previous year.
provision_attempts_last_24_hours	optional	integer	Number of Add Card attempts in the last 24 hours.
purchases_count_last_6_months	optional	integer	Number of purchases with this cardholder account during the previous six months.
suspicious_activity_indicator	optional	string(22)	Indicates whether the 3DS Requestor has experienced suspicious activity (including previous fraud) on the cardholder account. Accepted values are: **no_suspicious_observed**, **suspicious_observed**.
registration_indicator	optional	string(19)	Indicates the length of time that the payment account was enrolled in the cardholder's account with the 3DS Requester. Accepted values are: **guest_checkout**, **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
registration_date	optional	dd-mm-yyyy	Date that the payment account was enrolled in the cardholder's account with the 3DS Requestor.
browser	required*		For browser-based transactions. They are all *required* in case the **device_type** is set to **browser**
accept_header	required*	string(2048)	The exact content of the HTTP **ACCEPT** header as sent to the 3DS Requester from the Cardholder browser. Any other header different than the **ACCEPT** header will be rejected. Example: `application/json,text/plain,text/html,*/*`.
java_enabled	required*	boolean	Boolean that represents the ability of the cardholder browser to execute Java. The value can be retrieved by accessing a property of the navigator with JavaScript, `navigator.javaEnabled`.

Parameter	Required	Format	Description
language	required*	string(8)	Value representing the browser language as defined in IETF BCP47. Note that only one browser language tag is about to be submitted as per the above **IETF BCP47**. Numeric chars are also allowed in the subtag and will represent the region.Example: `en-GB`, `zh-guoyu`, `fil-PH`, `gsw`, `es-419`, `de-1996`, etc. The value can be retrieved by accessing a property of the navigator with JavaScript, `navigator.language`.
color_depth	required*	integer	Value representing the bit depth of the colour palette for displaying images, in bits per pixel. Obtained from Cardholder browser using the `screen.colorDepth` property. The value as per EMVCo specs can be one of **1**, **4**, **8**, **15**, **16**, **24**, **32**, **48**. In case, an unsupported `color_depth` is determined, the nearest supported value that is less than the actual one needs to be submitted. For example, if the obtained value is **30**, which is not supported as per EMVCo specs, **24** has to be submitted.
screen_height	required*	integer	Total height of the Cardholder's screen in pixels. Value is returned from the screen.height property.
screen_width	required*	integer	Total width of the Cardholder's screen in pixels. Value is returned from the screen.width property.
time_zone_offset	required*	string(5)	Time difference between UTC time and the Cardholder browser local time, in **minutes**. Note that the offset is positive if the local time zone is behind UTC and negative if it is ahead. If **UTC -5** hours then submit `300` or `+300`, If **UTC +2** hours then `-120`. The value can be retrieved using Javascript `getTimezoneOffset()` method over **Date** object.
user_agent	required*	string(2048)	Exact content of the HTTP user-agent header.
sdk	required*		For application-based transactions. They are all *required* in case the **device_type** is set to **application**
interface	required*	string(6)	SDK Interface types that the device of the consumer supports for displaying specific challenge interfaces within the SDK. Accepted values are: **native**, **html**, **both**.
ui_types	required*		Lists all UI types that the device of the consumer supports for displaying specific challenge interfaces within the SDK.
ui_type	required*	string(13)	UI type that the device of the consumer supports for displaying specific challenge interface. Accepted values are: **text**, **single_select**, **multi_select**, **out_of_bag**, **other_html**.
application_id	required*	string(36)	Universally unique ID created upon all installations and updates of the 3DS Requestor APp on a Customer Device. This will be newly generated and stored by the 3DS SDK for each installation or update. The field is limited to 36 characters and it shall have a canonical format as defined in IETF RFC 4122.
encrypted_data	required*	string(64000)	JWE Object as defined Section 6.2.2.1 containing data encrypted by the SDK for the DS to decrypt. The data will be present when sending to DS, but not present from DS to ACS.
ephemeral_public_key_pair	required*	string(256)	Public key component of the ephemeral key pair generated by the 3DS SDK and used to establish session keys between the 3DS SDK and ACS. In AReq, this data element is contained within the ACS Signed Content JWS Object. The field is limited to maximum 256 characters.
max_timeout	required*	integer	Indicates the maximum amount of time (in minutes) for all exchanges. The field shall have value greater or equals than 05.
reference_number	required*	string(32)	Identifies the vendor and version of the 3DS SDK that is integrated in a 3DS Requestor App, assigned by EMVCo when the 3DS SDK is approved. The field is limited to 32 characters.
recurring	optional		Additional recurring details.
expiration_date	optional	dd-mm-yyyy	A future date indicating the end date for any further subsequent transactions. For more information, go to 3DSv2 recurring params
frequency	optional	integer	Indicates the minimum number of days between subsequent transactions. An empty value indicates the payment frequency is not set.For more information, go to 3DSv2 recurring params

`required* = conditionally required`

`1 - required if mpi_params is not present, the transaction will be handled asynchronously. Not required if configured on Terminal or Merchant level. Contact [tech-support@#{email_domain_name}](mailto:tech-support@#{email_domain_name}) for more details.`

`2 - required if transaction should be handled synchronous.`

`3 - eci is always required if mpi_params is present. xid and cavv are not required for the 3D attempted only workflow, where the merchant does not have the xid/cavv, only the eci.`

`4 - protocol_version is only required if 3DSv2 is used. When missing 3DSv1 will be used. directory_server_id is mandatory when protocol_version is 2.`

`5 - visa_merchant_id is required when exemption value is trusted_merchant.`

Successful Synchronous Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [cvv_result_code] => M
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:59.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
    [partial_approval] => false
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <cvv_result_code content=[M]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <timestamp content=[2021-02-04T15:25:59Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
    <partial_approval content=[false]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```
{
    transaction_type: "init_recurring_sale3d",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    cvv_result_code: "M",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    timestamp: "2021-02-04T15:25:59Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
    partial_approval: "false",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <cvv_result_code>M</cvv_result_code>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:25:59Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
  <partial_approval>false</partial_approval>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_transaction>
```


Successful Asynchronous Response


```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v1_payer_authentication
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:59.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v1_payer_authentication]>
    <timestamp content=[2021-02-04T15:25:59Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "init_recurring_sale3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v1_payer_authentication",
    timestamp: "2021-02-04T15:25:59Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v1_payer_authentication</redirect_url_type>
  <timestamp>2021-02-04T15:25:59Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Frictionless / Challenge / Fallback With 3 Ds Method Response


```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [threeds_method_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method
    [threeds_method_continue_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:59.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <threeds_method_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method]>
    <threeds_method_continue_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48]>
    <timestamp content=[2021-02-04T15:25:59Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "init_recurring_sale3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    threeds_method_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method",
    threeds_method_continue_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48",
    timestamp: "2021-02-04T15:25:59Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <threeds_method_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method</threeds_method_url>
  <threeds_method_continue_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48</threeds_method_continue_url>
  <timestamp>2021-02-04T15:25:59Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Challenge Without 3 Ds Method Response


```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v2_challenge
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:59.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v2_challenge]>
    <timestamp content=[2021-02-04T15:25:59Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "init_recurring_sale3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v2_challenge",
    timestamp: "2021-02-04T15:25:59Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v2_challenge</redirect_url_type>
  <timestamp>2021-02-04T15:25:59Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Fallback To 3 D Sv1 Without 3 Ds Method Response


```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v1_payer_authentication
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:59.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```xml
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v1_payer_authentication]>
    <timestamp content=[2021-02-04T15:25:59Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "init_recurring_sale3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v1_payer_authentication",
    timestamp: "2021-02-04T15:25:59Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v1_payer_authentication</redirect_url_type>
  <timestamp>2021-02-04T15:25:59Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
consumer_id	string(10)	Consumer unique reference. See Consumers
token	string(36)	Plain-text token value. See Tokenization
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where the consumer has to be redirected to complete the payment process unless a 3DSecure Method is required. This **redirect_url** will not be included in the response if a 3DS-Method submission is required. For more information, to go 3DSv2 authentication flows
redirect_url_type	string(64)	The type of the redirect URL in the 3DS scope. It will be present only for asynchronous 3D transactions when an interaction between consumer and issuer is required. This type identifies what kind of redirect url is returned, 3DSv2 Challenge or 3DSv1 Payer Authentication. For more information, to go 3DSv2 authentication flows
threeds_method_url	url	3DSecure Method URL. It will be present only then 3DS-Method is required for 3D transaction. A 3DS-Method submission inside an iframe is required to be submitted using HTTP POST. For more information, to go 3DSv2 authentication flows
threeds_method_continue_url	url	This is an API endpoint that accepts HTTP PUT & HTTP PATCH requests. It will be present when the **threeds_method_url** is included in the response. An HTTP PUT request must be submitted to that endpoint together with the proper signature to determine what the next step in the authentication is. For more information, to go 3DSv2 authentication flows
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.
scheme_transaction_identifier	string(32)	Id defined by card schemes. Corresponds to NETWORK DATA (field 63) for MasterCard or TRANS ID (field 62.2/125) for VISA.

Parameter	Type	Description
scheme_settlement_date	string(4)	MasterCard settlement date in MMDD format (e.g. 0205). Corresponds to NETWORK DATA (field 15).

Error Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] => 57
    [code] => 340
    [technical_message] => expiration_year is invalid
    [message] => expiration_year is invalid
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:25:59.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[57]>
    <code content=[340]>
    <technical_message content=[expiration_year is invalid]>
    <message content=[expiration_year is invalid]>
    <timestamp content=[2021-02-04T15:25:59Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "init_recurring_sale3d",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "57",
    code: "340",
    technical_message: "expiration_year is invalid",
    message: "expiration_year is invalid",
    timestamp: "2021-02-04T15:25:59Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <response_code>57</response_code>
  <code>340</code>
  <technical_message>expiration_year is invalid</technical_message>
  <message>expiration_year is invalid</message>
  <timestamp>2021-02-04T15:25:59Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant

Parameter	Type	Description
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

NOTIFICATION FOR ASYNCHRONOUS PAYMENTS

When using asynchronous payments like 3D-Secure transactions, the transaction might depend on user input. Therefore, the outcome of the transaction is not available immediately after sending the request.

The gateway will send a notification to the merchant's server as soon as the payment has been completed (either approved or declined).

If the user cancels the payment (or the user has not completed the payment within the given time frame, e.g. 2 hours), the transaction will time out and a notification will be sent.

The notification will be sent as an HTTP POST to the `notification_url` specified in the transaction request XML. See Notifications for the HTTP POST-Data and format. Notification will be pure HTTP or HTTPS-based, depending on the URL given by the merchant in the `notification_url`. In case it is a HTTPS-based notification, no SSL verification of the merchant SSL certificate will be performed. Until a notification echo is rendered by the merchant, there will be up to 10 notifications sent, each with a timeout of 15 minutes. Note that notifications in the PROD env will be sent from 80.82.206.228 and 5.179.225.28 for the PROD env, and only 80.82.206.228 for the STG env, so make sure these IP addresses are whitelisted respectively. Note also that notifications are delivered to either port 80 (HTTP notification) or port 443 (HTTPS notification), so make sure the correct `notification_url` is passed in the transaction request in the first place.

Also see 3-D secure workflow.

Wallets

NETELLER

> Neteller transactions are only synchronous. When the payment reaches a final state Genesis gateway sends notification to merchant on the configured url into its account.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Wallets\Neteller');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCustomerAccount('453501020503')
        ->setAccountPassword('908379')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.wallets.NetellerRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    NetellerRequest request = new NetellerRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCustomerAccount("453501020503");
    request.setAccountPassword("908379");
    request.setCustomerEmail("travis@example.com");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.neteller(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "USD",
    "customer_account": "453501020503",
    "account_password": "908379",
    "customer_email": "travis@example.com",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>neteller</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <notification_url>https://www.example.com/notification</notification_url>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>USD</currency>
   <customer_account>453501020503</customer_account>
   <account_password>908379</account_password>
   <customer_email>travis@example.com</customer_email>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **neteller**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
customer_account	required	string(100)	Customer email/id of neteller account
account_password	required	string(6)	Account secret password
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City

Parameter	Required	Format	Description
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => neteller
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:00.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[neteller]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:00Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "neteller",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:00Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>neteller</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:00Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)

Parameter	Type	Description
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => neteller
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:00.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[neteller]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:00Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "neteller",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:00Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>neteller</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:00Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

PAYPAL EXPRESS CHECKOUT

Express Checkout is a fast, easy way for buyers to pay with PayPal. Express Checkout eliminates one of the major causes of checkout abandonment by giving buyers all the transaction details at once, including order details, shipping options, insurance choices, and tax totals.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\PaypalExpress');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.PayPalExpressRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PayPalExpressRequest request = new PayPalExpressRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCustomerEmail("travis@example.com");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.paypal_express(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "USD",
    "customer_email": "travis@example.com",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>paypal_express</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <notification_url>https://www.example.com/notification</notification_url>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>USD</currency>
   <customer_email>travis@example.com</customer_email>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **paypal_express**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => paypal_express
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:00.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[paypal_express]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:00Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "paypal_express",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:00Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>paypal_express</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:00Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => paypal_express
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:00.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[paypal_express]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:00Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "paypal_express",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:00Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>paypal_express</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:00Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states

Parameter	Type	Description
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

WEBMONEY

WebMoney is a global settlement system and environment for online business activities. Over 28 million people from all over the world have joined the system. Although WebMoney is targeted mainly at clients in Russia and the Former Soviet Union, it is now used worldwide.

WebMoney transactions can be either asynchronous or synchronous, based on 'is_payout' flag. After a successful validation of transaction parameters, transaction status is set to pending_async, the user is redirected to WebMoney authentication page where he enters additional information to finish the payment. When the payment reaches a final state Genesis gateway sends notification to merchant on the configured url into its account. When the payment is checked as payout then the transaction is synchronous and transaction status is set immediately after the response.

Auth Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Wallets\WebMoney');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setCustomerPhone('+1987987987987')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.wallets.WebMoneyRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    WebMoneyRequest request = new WebMoneyRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setCustomerPhone("+1987987987987");
    request.setCustomerEmail("travis@example.com");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.webmoney(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "customer_phone": "+1987987987987",
    "customer_email": "travis@example.com",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>webmoney</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <customer_phone>+1987987987987</customer_phone>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Payout Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Wallets\WebMoney');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setIsPayout('true')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setCustomerPhone('+1987987987987')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.wallets.WebMoneyRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    WebMoneyRequest request = new WebMoneyRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setIsPayout("true");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setCustomerPhone("+1987987987987");
    request.setCustomerEmail("travis@example.com");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.webmoney(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "is_payout": "true",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "customer_phone": "+1987987987987",
    "customer_email": "travis@example.com",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>webmoney</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <is_payout>true</is_payout>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <customer_phone>+1987987987987</customer_phone>
   <customer_email>travis@example.com</customer_email>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **webmoney**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
is_payout	required*	string	Value:true/false Flag for payout transaction
customer_account_id	required*	string(12)	Webmoney account ID (WMID). This field is required if is payout is set to "true"
customer_email	required	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City

Parameter	Required	Format	Description
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Auth Response


```
stdClass Object
(
    [transaction_type] => webmoney
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:01.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[webmoney]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:01Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "webmoney",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:01Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>webmoney</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:01Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Payout Response

```
stdClass Object
(
    [transaction_type] => webmoney
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:01.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[webmoney]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:01Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "webmoney",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:01Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>webmoney</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:01Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z

Parameter	Type	Description
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => webmoney
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:01.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[webmoney]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:01Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "webmoney",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:01Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>webmoney</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:01Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant

Parameter	Type	Description
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

WECHAT

WeChat Pay solution offers merchants access to the over 300 million WeChat users that have linked payment accounts to their WeChat account. The solution works on desktop and mobile via a QR code generation platform.

Wechat payment transaction - after a successful validation of transaction parameters, transaction status is set to pending async and the consumer is redirected to page that contains the QR Code for scan. The consumer then opens the WeChat application on phone and scans the QR Code for payment confirmation. The gateway waits for an async notification from PaySec with the payment result of the consumer bank payment and updates the transaction status accordingly.

When the payment reaches a final state, the gateway sends a notification to the merchant on the configured notification URL for the merchant.

Supported countries: All countries are supported

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\WeChat');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnUrl('https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setProductCode('product-code')
        ->setProductNum('1234')
        ->setProductDesc('Product description')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.oBeP.WechatRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    WechatRequest request = new WechatRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnUrl(new URL("https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setProductCode("product-code");
    request.setProductNum("1234");
    request.setProductDesc("Product description");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.wechat(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "notification_url": "https://www.example.com/notification",
    "return_url": "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f",
    "amount": "100",
    "currency": "USD",
    "product_code": "product-code",
    "product_num": "1234",
    "product_desc": "Product description",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>wechat</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <notification_url>https://www.example.com/notification</notification_url>
   <return_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f</return_url>
   <amount>100</amount>
   <currency>USD</currency>
   <product_code>product-code</product_code>
   <product_num>1234</product_num>
   <product_desc>Product description</product_desc>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **wechat**
transaction_id	required	string(30)	Unique transaction id defined by merchant
usage	required	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
notification_url	required	url	URL at merchant where gateway sends outcome of transaction.
return_url	required	url	URL where consumer is sent to after payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details Max amount in minor currency unit: 999999
currency	required	string(3)	Currency code in ISO 4217
product_code	optional	string(60)	Product code
product_num	optional	integer(10)	Product number
product_desc	optional	string(255)	Product description
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => wechat
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:01.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[wechat]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:01Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "wechat",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:01Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>wechat</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:01Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(30)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => wechat
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:01.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[wechat]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Please check input data for errors!]>
    <timestamp content=[2021-02-04T15:26:01Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "wechat",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Please check input data for errors!",
    timestamp: "2021-02-04T15:26:01Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>wechat</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:01Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states

Parameter	Type	Description
transaction_id	string(30)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

ALIPAY

Alipay is an oBeP-style alternative payment method that allows you to pay directly with your ebank account.

After initiating a transaction Alipay will redirect you to their page.

There you will see a picture of a QR code, which you will have to scan with your Alipay mobile application.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\Alipay');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('CNY')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.oBeP.AlipayRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AlipayRequest request = new AlipayRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("CNY");
    request.setCustomerEmail("travis@example.com");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.alipay(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "CNY",
    "customer_email": "travis@example.com",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>alipay</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <notification_url>https://www.example.com/notification</notification_url>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>CNY</currency>
   <customer_email>travis@example.com</customer_email>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **alipay**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	optional	e-mail address	Must contain valid e-mail of customer
customer_phone	optional	string(32)	Must contain valid phone number of customer
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
billing_address	optional		See Required vs Optional API params for details
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported currencies

Currency name	Currency code
China yen	CNY
Euro	EUR

Successful Response

```
stdClass Object
(
    [transaction_type] => alipay
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:01.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => CNY
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[alipay]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:01Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[CNY]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "alipay",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:01Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "CNY",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>alipay</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:01Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>CNY</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => alipay
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:01.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => CNY
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[alipay]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:01Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[CNY]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "alipay",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:01Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "CNY",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>alipay</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:01Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>CNY</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states

Parameter	Type	Description
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

EZEEWALLET

eZeeWallet is a comprehensive digital wallet, connecting multiple payment methods simultaneously. It has the highest level of security, offering you a unique way to make secure and quick online payments. Consumers can upload funds to your account using P24, Trustly, Invoice (Sofort), GiroPay, iDeal, eps, NeoSurf and bank transfer and pay fast for goods and services with their available eZeeWallet balances.

> eZeeWallet and Genesis merchant accounts should be synced since authentication to eZeeWallet is done with Genesis merchant credentials

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Wallets\eZeeWallet');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setSourceWalletId('john@example.com')
        ->setSourceWalletPwd('UDBydsDBrYWxAQA==\n')
        ->setAmount('100')
        ->setCurrency('USD');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.wallets.EzeewalletRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    EzeewalletRequest request = new EzeewalletRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setSourceWalletId("john@example.com");
    request.setSourceWalletPwd("UDBydsDBrYWxAQA==\n");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.ezeewallet(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "source_wallet_id": "john@example.com",
    "source_wallet_pwd": "UDBydsDBrYWxAQA==\\n",
    "amount": "100",
    "currency": "USD"
  }
).send()
  .then(success)
  .catch(failure);
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>ezeewallet</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <source_wallet_id>john@example.com</source_wallet_id>
    <source_wallet_pwd>UDBydsDBrYWxAQA==\n</source_wallet_pwd>
    <amount>100</amount>
    <currency>USD</currency>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **ezeewallet**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
source_wallet_id	required	string(255)	Email address of consumer who owns the wallet
source_wallet_pwd	required	string(255)	Password of consumer who owns the wallet, in **Base64 encoded form**
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
notification_url	optional	url	URL at merchant where gateway sends outcome of transaction.

`required* = conditionally required`

return_success_url, return_failure_url and notification_url are used in case of top-up, i.e the customer does not have enough money to pay for the product

Successful Response

```
stdClass Object
(
    [transaction_type] => ezeewallet
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:01.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ezeewallet]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:01Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ezeewallet",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:01Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ezeewallet</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:01Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Pending Response

```
stdClass Object
(
    [transaction_type] => ezeewallet
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:01.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ezeewallet]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:01Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ezeewallet",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:01Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ezeewallet</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:01Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Pending Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response


```
stdClass Object
(
    [transaction_type] => ezeewallet
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 930
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:01.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```xml
<payment_response content=[
    <transaction_type content=[ezeewallet]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[930]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:01Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```json
{
    transaction_type: "ezeewallet",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "930",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:01Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ezeewallet</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>930</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:01Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

EWALLET

eWallet transaction that handles different e-wallet providers

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Wallets\EWallet');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('Free Charge')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('50000')
        ->setCurrency('INR')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>e_wallet</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <payment_type>Free Charge</payment_type>
   <remote_ip>245.253.2.12</remote_ip>
   <notification_url>https://www.example.com/notification</notification_url>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>50000</amount>
   <currency>INR</currency>
   <customer_email>travis@example.com</customer_email>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **e_wallet**
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_type	required	string	eWallet provider name: *Airtel Money* / *Amazon pay* / *Free Charge* / *Jio Money* / *Ola Money* / *Paytm* / *Payzapp* / *PhonePe*
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported currencies

Currency name	Currency code
Indian rupee	INR

Successful Response

```
stdClass Object
(
    [transaction_type] => e_wallet
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:02.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 50000
    [currency] => INR
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>e_wallet</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:02Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>50000</amount>
  <currency>INR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => e_wallet
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [technical_message] => amount is missing
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:02.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 50000
    [currency] => INR
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>e_wallet</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <technical_message>amount is missing</technical_message>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:02Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>50000</amount>
  <currency>INR</currency>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Vouchers

CASHU

CashU transactions are only asynchronous. After a successful validation of transaction parameters, transaction status is set to pending async, the user is redirected to CashU authentication page where he enters additional information to finish the payment. When the payment reaches a final state Genesis gateway sends notification to merchant on the configured url into its account.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Vouchers\CashU');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.CashURequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    CashURequest request = new CashURequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.cashu(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "EUR",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>cashu</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>EUR</currency>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **cashu**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name

Parameter	Required	Format	Description
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries

Country name	Country code
Algeria	DZ
Bahrain	BH
Egypt	EG
Gambia	GM
Ghana	GH
India	IN
Iran	IR
Iraq	IQ
Israel	IL
Jordan	JO
Kenya	KE
Korea	KP
Kuwait	KW
Lebanon	LB
Libya	LY
Malaysia	MY
Mauritania	MR
Morocco	MA
Nigeria	NG
Oman	OM
Pakistan	PK
Palestine	PS
Qatar	QA
Saudi Arabia	SA

Country name	Country code
Sierra Leone	SL
Sudan	SD
Syria	SY
Tanzania	TZ
Tunisia	TN
Turkey	TR
United Arab Emirates	AE
United States	US
Yemen	YE

Supported currencies

Currency name	Currency code
Algerian Dinar	DZD
AmericanDollar	USD
EgyptianPound	EGP
Euro	EUR
JordanianDinar	JOD
LebanesePound	LBP
MoroccanDirham	MAD
Qatar Riyal	QAR
Saudi Riyal	SAR
Turkish Lira	TRY
UAE Dirham	AED

Successful Response

```
stdClass Object
(
    [transaction_type] => cashu
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:02.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[cashu]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:02Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "cashu",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:02Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>cashu</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:02Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response


```
stdClass Object
(
    [transaction_type] => cashu
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:02.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```xml
<payment_response content=[
    <transaction_type content=[cashu]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:02Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```json
{
    transaction_type: "cashu",
    status: "error",
    mode: "live",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:02Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>cashu</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:02Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

NEOSURF

Neosurf is a prepaid card (voucher) that is used for online shopping. The card is available in over 100,000 stores worldwide, where customers can buy the prepaid vouchers, denominated up to EUR 250.00 or its equivalent in other currencies. This transaction is synchronous.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Vouchers\Neosurf');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setVoucherNumber('')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('23, Doestreet')
        ->setBillingZipCode('11923')
        ->setBillingCity('New York City')
        ->setBillingCountry('DE');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>neosurf</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>EUR</currency>
    <payment_transaction>voucher_number</payment_transaction>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>23, Doestreet</address1>
      <zip_code>11923</zip_code>
      <city>New York City</city>
      <country>DE</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **neosurf**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
voucher_number	required*	string(10)	Voucher number. Alphanumeric maximum 10 characters
customer_email	required*	e-mail address	Must contain valid e-mail of customer

Parameter	Required	Format	Description
customer_phone	required*	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries

Country Name	Country code
Austria	AT
Algeria	DZ
Australia	AU
Burundi	BI
Burkina Faso	BF
Benin	BJ
Belgium	BE
Cape Verde	CV
Cyprus	CY
Canada	CA
Central African Republic	CF
Chad	TD
Colombia	CO
Congo	CG
Cameroon	CM
Democratic Republic of Congo	CD
Denmark	DK
Equatorial Guinea	GQ
France	FR
Gambia	GM
Germany	DE

Country Name	Country code
Gabon	GA
Guinea	GN
Ghana	GH
Guinea-Bissau	GW
Hong Kong	HK
Ireland	IE
Italy	IT
Ivory Coast	CI
Kenya	KE
Luxembourg	LU
Malawi	MW
Mozambique	MZ
Morocco	MA
Mauritania	MR
Mali	ML
Niger	NE
Nigeria	NG
Netherlands	NL
New Zealand	NZ
Norway	NO
Poland	PL
Portugal	PT
Rwanda	RW
Russia	RU
Romania	RO
Sweden	SE
Spain	ES
Sierra Leone	SL
Senegal	SN
Sao Tome and Principe	ST
Switzerland	CH
Serbia	RS
Turkey	TR
Togo	TG
Tunisia	TN
United Kingdom	GB
United Republic of Tanzania	TZ
Uganda	UG
Zimbabwe	ZW
Zambia	ZM

Successful Response

```
stdClass Object
(
    [transaction_type] => neosurf
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:02.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>neosurf</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:02Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => neosurf
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:02.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>neosurf</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:02Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

PAYSAFECARD

Paysafecard transactions are only asynchronous. After a successful validation of transaction param- eters transaction status is set to pending async the user is redirected to Paysafecard authentication page where he enters additional information to finish the payment. When the payment reaches a final state Genesis gateway sends notification to merchant on the configured url into its account.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Vouchers\Paysafecard');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.PaySafeCardRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PaySafeCardRequest request = new PaySafeCardRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.paysafecard(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "USD",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>paysafecard</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **paysafecard**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name

Parameter	Required	Format	Description
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country name	Country code
Australia	AU
Austria	AT
Belgium	BE
Bulgaria	BG
Canada	CA
Croatia	HR
Cyprus	CY
Czech Republic	CZ
Denmark	DK
Finland	FI
France	FR
Georgia	GE
Germany	DE
Gibraltar	GI
Greece	GR
Hungary	HU
Iceland	IS
Ireland	IE
Italy	IT
Kuwait	KW
Latvia	LV
Liechtenstein	LI
Lithuania	LT
Luxembourg	LU

Country name	Country code
Malta	MT
Mexico	MX
Montenegro	ME
Netherlands	NL
New Zealand	NZ
Norway	NO
Paraguay	PY
Peru	PE
Poland	PL
Portugal	PT
Romania	RO
Saudi Arabia	SA
Slovakia	SK
Slovenia	SI
Spain	ES
Sweden	SE
Switzerland	CH
Turkey	TR
United Arab Emirates	AE
United Kingdom	GB
United States of America	US
Uruguay	UY

Successful Response

```
stdClass Object
(
    [transaction_type] => paysafecard
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:02.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[paysafecard]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:02Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "paysafecard",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:02Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>paysafecard</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:02Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response


```
stdClass Object
(
    [transaction_type] => paysafecard
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:02.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```xml
<payment_response content=[
    <transaction_type content=[paysafecard]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:02Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```json
{
    transaction_type: "paysafecard",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:02Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>paysafecard</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:02Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Online Banking ePayments (oBeP)

Online Banking ePayments refer to payment methods that are used as an alternative to credit card payments allowing consumers to pay online with their bank account.

BANCO DO BRASIL

> Banco do Brasil offers online bank transfer payment service.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\BancoDoBrasil');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rubble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Natal')
        ->setBillingCountry('BR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>banco_do_brasil</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rubble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Natal</city>
      <country>BR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **banco_do_brasil**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	string(20)	Birth date of the customer
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
BR

Successful Response

```
stdClass Object
(
    [transaction_type] => banco_do_brasil
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:03.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>banco_do_brasil</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:03Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => banco_do_brasil
    [status] => error
    [mode] => live
    [transaction_id] => 1196432505475 01c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:03.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>banco_do_brasil</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:03Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

BANCOMER

Bancomer offers two options for payments in Mexico, cash payment and bank transfer.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\Bancomer');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rubble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Mexico City')
        ->setBillingCountry('MX')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>bancomer</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rubble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Mexico City</city>
      <country>MX</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **bancomer**

Parameter	Required	Format	Description
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	string(20)	Birth date of the customer
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
MX

Successful Response

```
stdClass Object
(
    [transaction_type] => bancomer
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:03.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bancomer</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:03Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => bancomer
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:03.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bancomer</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:03Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

BRADESCO

Bradesco is a payment service in Brazil

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\Bradesco');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rubble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Rio de Janeiro')
        ->setBillingCountry('BR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>bradesco</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rubble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Rio de Janeiro</city>
      <country>BR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **bradesco**

Parameter	Required	Format	Description
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	string(20)	Birth date of the customer
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
BR

Successful Response

```
stdClass Object
(
    [transaction_type] => bradesco
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:03.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bradesco</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:03Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => bradesco
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:03.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bradesco</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:03Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

EPS

EPS is the main bank transfer payment method in Austria. Every transaction is guaranteed via the scheme.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>eps</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>EUR</currency>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Vienna</city>
      <country>AT</country>
    </billing_address>
  </payment_transaction>'
```

Request

```
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\PPRO');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('eps')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('EUR')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Vienna')
        ->setBillingCountry('AT');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.PProRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PProRequest request = new PProRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setPaymentType("eps");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");


    // Billing Address
    request.setBillingFirstname("Barney");
    request.setBillingLastname("Rubble");
    request.setBillingPrimaryAddress("14, Nerazdelni str");
    request.setBillingZipCode("1407");
    request.setBillingCity("Vienna");
    request.setBillingCountry("AT");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.ppro(
  {
    "transaction_id": "119643250547501c79d8295",
    "payment_type": "eps",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "EUR",
    "billing_address": {
      "first_name": "Barney",
      "last_name": "Rubble",
      "address1": "14, Nerazdelni str",
      "zip_code": "1407",
      "city": "Vienna",
      "country": "AT"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>ppro</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <payment_type>eps</payment_type>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>EUR</currency>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Vienna</city>
     <country>AT</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	**ppro** or **eps**. Contact tech support at tech-support@e-comprocessing.com for more details.
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_type	required[1]	eps	EPS. Contact tech support for more details.
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

```
1 - payment_type must be submitted only when the transaction type is set to ppro
```

Supported countries and countries

Currency code	Country code
EUR	AT

Successful Response

```
stdClass Object
(
    [transaction_type] => ppro
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:04.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:04Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:04Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:04Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant

Parameter	Type	Description
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => ppro
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:04.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:04Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:04Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:04Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

GIROPAY

GiroPay is a popular real-time bank transfer payment method in Germany that integrates more than 1,500 German banks.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>giropay</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <return_pending_url>http://www.example.com/pending</return_pending_url>
   <amount>100</amount>
   <currency>EUR</currency>
   <customer_phone>+1987987987987</customer_phone>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Berlin</city>
     <country>DE</country>
   </billing_address>
 </payment_transaction>'
```

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\PPRO');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('giropay')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setBic('GENODETT488')
        ->setIban('DE07444488880123456789')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Berlin')
        ->setBillingCountry('DE');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.PProRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PProRequest request = new PProRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setPaymentType("giropay");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");
    request.setBic("GENODETT488");
    request.setIban("DE07444488880123456789");


    // Billing Address
    request.setBillingFirstname("Barney");
    request.setBillingLastname("Rubble");
    request.setBillingPrimaryAddress("14, Nerazdelni str");
    request.setBillingZipCode("1407");
    request.setBillingCity("Berlin");
    request.setBillingCountry("DE");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.ppro(
  {
    "transaction_id": "119643250547501c79d8295",
    "payment_type": "giropay",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "EUR",
    "bic": "GENODETT488",
    "iban": "DE07444488880123456789",
    "billing_address": {
      "first_name": "Barney",
      "last_name": "Rubble",
      "address1": "14, Nerazdelni str",
      "zip_code": "1407",
      "city": "Berlin",
      "country": "DE"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>ppro</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <payment_type>giropay</payment_type>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>EUR</currency>
    <bic>GENODETT488</bic>
    <iban>DE07444488880123456789</iban>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Berlin</city>
      <country>DE</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	**ppro** or **giropay**. Contact tech support at tech-support@e-comprocessing.com for more details.
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_type	required[1]	giropay	GiroPay. Contact tech support for more details.
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
bic	required	string(11)	Valid BIC string. Must be 8 or 11 characters long
iban	required*	string(22)	String must start with ”DE” followed by 20 digits

Parameter	Required	Format	Description
billing_address	required		See Required vs Optional API params for details
first_name	required	string(255)	Customer first name
last_name	required	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

`1 - payment_type must be submitted only when the transaction type is set to ppro`

Supported currencies and countries

Currency code	Country code
EUR	DE

Successful Response

```
stdClass Object
(
    [transaction_type] => ppro
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:04.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:04Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:04Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:04Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response


```
stdClass Object
(
    [transaction_type] => ppro
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:04.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```xml
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:04Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```json
{
    transaction_type: "ppro",
    status: "error",
    mode: "live",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:04Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:04Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

IDEBIT

iDebit connects consumers to their online banking directly from checkout, enabling secure, real-time payments without a credit card. Using iDebit allows consumers to transfer funds to merchants without revealing their personal banking information.

The main difference between iDebit and InstaDebit is that InstaDebit uses eCheck, iDebit uses online bank transfer.

iDebit transactions have payins and payouts. The payin is asynchronous, while the payout is synchronous.

iDebit Payin transaction - after a successful validation of transaction parameters, transaction status is set to pending async and the consumer is redirected to the iDebit consumers page.

The consumer then carries out the specified transaction details and finalizes the transaction. The gateway waits for an async notification from iDebit with the payment result of the consumer bank payment executed on the iDebit consumers page, and updates the transaction status accordingly.

When the payment reaches a final state, the gateway sends a notification to the merchant on the configured notification URL for the merchant. iDebit Payout transaction - the transaction is synchronous and transaction status is set immediately after the response.

Supported countries

Country name	Country code
Canada	CA

iDebit is available only for Canadian merchants and consumers.

PAYIN

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\iDebit\Payin');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setCustomerAccountId('1534537')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnUrl('https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f')
        ->setAmount('100')
        ->setCurrency('CAD')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('46 Donora Dr')
        ->setBillingZipCode('M4B1B3')
        ->setBillingCity('Toronto')
        ->setBillingState('ON')
        ->setBillingCountry('CA');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.oBeP.IDebitPayInRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    IDebitPayInRequest request = new IDebitPayInRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setCustomerAccountId("1534537");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnUrl(new URL("https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("CAD");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("46 Donora Dr");
    request.setBillingZipCode("M4B1B3");
    request.setBillingCity("Toronto");
    request.setBillingState("ON");
    request.setBillingCountry("CA");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.idebit_payin(
  {
    "transaction_id": "119643250547501c79d8295",
    "customer_account_id": "1534537",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "notification_url": "https://www.example.com/notification",
    "return_url": "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f",
    "amount": "100",
    "currency": "CAD",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "46 Donora Dr",
      "zip_code": "M4B1B3",
      "city": "Toronto",
      "state": "ON",
      "country": "CA"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>idebit_payin</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <customer_account_id>1534537</customer_account_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <notification_url>https://www.example.com/notification</notification_url>
   <return_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f</return_url>
   <amount>100</amount>
   <currency>CAD</currency>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>46 Donora Dr</address1>
     <zip_code>M4B1B3</zip_code>
     <city>Toronto</city>
     <state>ON</state>
     <country>CA</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **idebit_payin**
transaction_id	required	string(30)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
customer_account_id	required	string(20)	Unique consumer account ID
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
birth_date	required*	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => idebit_payin
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:04.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => CAD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[idebit_payin]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:04Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[CAD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "idebit_payin",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:04Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "CAD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>idebit_payin</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:04Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>CAD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(30)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => idebit_payin
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 320
    [message] => amount is missing!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:04.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => CAD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[idebit_payin]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[320]>
    <message content=[amount is missing!]>
    <timestamp content=[2021-02-04T15:26:04Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[CAD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "idebit_payin",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "320",
    message: "amount is missing!",
    timestamp: "2021-02-04T15:26:04Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "CAD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>idebit_payin</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>320</code>
  <message>amount is missing!</message>
  <timestamp>2021-02-04T15:26:04Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>CAD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states

Parameter	Type	Description
transaction_id	string(30)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

PAYOUT

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\iDebit\Payout');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setReferenceId('43672')
        ->setAmount('100')
        ->setCurrency('CAD');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.oBeP.IDebitPayOutRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    IDebitPayOutRequest request = new IDebitPayOutRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setReferenceId("43672");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("CAD");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.idebit_payout(
  {
    "transaction_id": "119643250547501c79d8295",
    "reference_id": "43672",
    "amount": "100",
    "currency": "CAD"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>idebit_payout</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <reference_id>43672</reference_id>
    <amount>100</amount>
    <currency>CAD</currency>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **idebit_payout**
transaction_id	required	string(30)	Unique transaction id defined by merchant
reference_id	required	string(32)	Unique id returned by corresponding transaction
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => idebit_payout
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:04.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [amount] => 100
    [currency] => CAD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[idebit_payout]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:04Z]>
    <amount content=[100]>
    <currency content=[CAD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "idebit_payout",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:04Z",
    amount: "100",
    currency: "CAD",
    sent_to_acquirer: "true",
}
```



```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>idebit_payout</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:04Z</timestamp>
  <amount>100</amount>
  <currency>CAD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(30)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response


```
stdClass Object
(
    [transaction_type] => idebit_payout
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [technical_message] => amount is missing!
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:04.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [amount] => 100
    [currency] => CAD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[idebit_payout]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <technical_message content=[amount is missing!]>
    <message content=[Please check input data for errors!]>
    <timestamp content=[2021-02-04T15:26:04Z]>
    <amount content=[100]>
    <currency content=[CAD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "idebit_payout",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    technical_message: "amount is missing!",
    message: "Please check input data for errors!",
    timestamp: "2021-02-04T15:26:04Z",
    amount: "100",
    currency: "CAD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>idebit_payout</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <technical_message>amount is missing!</technical_message>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:04Z</timestamp>
  <amount>100</amount>
  <currency>CAD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(30)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

IDEAL

iDeal is the most popular payment method in the Netherlands and is a real-time bank transfer system covering all major Dutch consumer banks.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>ideal</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>EUR</currency>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Amsterdam</city>
      <country>NL</country>
    </billing_address>
  </payment_transaction>'
```

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\PPRO');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('ideal')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('EUR')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Amsterdam')
        ->setBillingCountry('NL');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.PProRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PProRequest request = new PProRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setPaymentType("ideal");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");


    // Billing Address
    request.setBillingFirstname("Barney");
    request.setBillingLastname("Rubble");
    request.setBillingPrimaryAddress("14, Nerazdelni str");
    request.setBillingZipCode("1407");
    request.setBillingCity("Amsterdam");
    request.setBillingCountry("NL");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.ppro(
  {
    "transaction_id": "119643250547501c79d8295",
    "payment_type": "ideal",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "EUR",
    "billing_address": {
      "first_name": "Barney",
      "last_name": "Rubble",
      "address1": "14, Nerazdelni str",
      "zip_code": "1407",
      "city": "Amsterdam",
      "country": "NL"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>ppro</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <payment_type>ideal</payment_type>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>EUR</currency>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Amsterdam</city>
     <country>NL</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	**ppro** or **ideal**. Contact tech support at tech-support@e-comprocessing.com for more details.
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_type	required[1]	ideal	iDeal. Contact tech support at tech-support@e-comprocessing.com for more details.
usage	optional	string(255)	Description of the transaction for later use.
bic	optional	string(11)	SWIFT/BIC code of the customer's bank
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

```
1 - payment_type must be submitted only when the transaction type is set to ppro
```

Supported currencies and countries

Currency code	Country code
EUR	NL

Successful Response

```
stdClass Object
(
    [transaction_type] => ppro
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:05.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:05Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:05Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:05Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant

Parameter	Type	Description
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => ppro
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:05.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:05Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:05Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:05Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

INSTADEBIT

InstaDebit connects consumers to their online banking directly from checkout, enabling secure, realtime payments without a credit card. Using InstaDebit allows consumers to transfer funds to merchants without revealing their personal banking information.

The main difference between iDebit and InstaDebit is that InstaDebit uses eCheck, iDebit uses online bank transfer.

InstaDebit transactions have payins and payouts. The payin is asynchronous, while the payout is synchronous.

InstaDebit Payin transaction - after a successful validation of transaction parameters, transaction status is set to pending async and the consumer is redirected to the InstaDebit consumers page. The consumer then carries out the specified transaction details and finalizes the transaction. The gateway waits for an async notification from InstaDebit with the payment result of the consumer bank payment executed on the InstaDebit consumers page, and updates the transaction status accordingly.

When the payment reaches a final state, the gateway sends a notification to the merchant on the configured notification URL for the merchant.

InstaDebit Payout transaction - the transaction is synchronous and transaction status is set immediately after the response.

Supported countries

Country name	Country code
Canada	CA

InstaDebit is available only for Canadian merchants and consumers.

PAYIN

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\InstaDebit\Payin');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setCustomerAccountId('118221674199')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnUrl('https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f')
        ->setAmount('100')
        ->setCurrency('CAD')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('46 Donora Dr')
        ->setBillingZipCode('M4B1B3')
        ->setBillingCity('Toronto')
        ->setBillingState('ON')
        ->setBillingCountry('CA');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.oBeP.InstaDebitPayInRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InstaDebitPayInRequest request = new InstaDebitPayInRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setCustomerAccountId("118221674199");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnUrl(new URL("https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("CAD");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("46 Donora Dr");
    request.setBillingZipCode("M4B1B3");
    request.setBillingCity("Toronto");
    request.setBillingState("ON");
    request.setBillingCountry("CA");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.insta_debit_payin(
  {
    "transaction_id": "119643250547501c79d8295",
    "customer_account_id": "118221674199",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "notification_url": "https://www.example.com/notification",
    "return_url": "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f",
    "amount": "100",
    "currency": "CAD",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "46 Donora Dr",
      "zip_code": "M4B1B3",
      "city": "Toronto",
      "state": "ON",
      "country": "CA"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>insta_debit_payin</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <customer_account_id>118221674199</customer_account_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f</return_url>
    <amount>100</amount>
    <currency>CAD</currency>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>46 Donora Dr</address1>
      <zip_code>M4B1B3</zip_code>
      <city>Toronto</city>
      <state>ON</state>
      <country>CA</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **insta_debit_payin**
transaction_id	required	string(30)	Unique transaction id defined by merchant
customer_account_id	required	string(20)	Unique consumer account ID
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_url	required	url	URL where consumer is sent to after payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name

Parameter	Required	Format	Description
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => insta_debit_payin
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:05.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => CAD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[insta_debit_payin]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:05Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[CAD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "insta_debit_payin",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:05Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "CAD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>insta_debit_payin</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:05Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>CAD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(30)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => insta_debit_payin
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:05.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => CAD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[insta_debit_payin]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <message content=[Please check input data for errors!]>
    <timestamp content=[2021-02-04T15:26:05Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[CAD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "insta_debit_payin",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    message: "Please check input data for errors!",
    timestamp: "2021-02-04T15:26:05Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "CAD",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>insta_debit_payin</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:05Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>CAD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(30)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

PAYOUT

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\InstaDebit\Payout');
    $request = $genesis->request();

    $request
        ->setReferenceId('43672')
        ->setAmount('100')
        ->setCurrency('CAD');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.oBeP.InstaDebitPayOutRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InstaDebitPayOutRequest request = new InstaDebitPayOutRequest();

    request.setReferenceId("43672");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("CAD");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.insta_debit_payout(
  {
    "reference_id": "43672",
    "amount": "100",
    "currency": "CAD"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <reference_id>43672</reference_id>
    <amount>100</amount>
    <currency>CAD</currency>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **insta_debit_payout**
transaction_id	required	string(30)	Unique transaction id defined by merchant
reference_id	required	string(32)	unique id of approved InstaDebit Payin transaction. See InstaDebit Payin Response, unique id
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details Max amount in minor currency unit: 999999
currency	required	string(3)	Currency code in ISO 4217

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => insta_debit_payout
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:05.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [amount] => 100
    [currency] => CAD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[insta_debit_payout]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:05Z]>
    <amount content=[100]>
    <currency content=[CAD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "insta_debit_payout",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:05Z",
    amount: "100",
    currency: "CAD",
    sent_to_acquirer: "true",
}
```

```
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>insta_debit_payout</transaction_type>
    <status>approved</status>
    <mode>live</mode>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
    <technical_message>Transaction successful!</technical_message>
    <message>Transaction successful!</message>
    <timestamp>2021-02-04T15:26:05Z</timestamp>
    <amount>100</amount>
    <currency>CAD</currency>
    <sent_to_acquirer>true</sent_to_acquirer>
  </payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(30)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => insta_debit_payout
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 320
    [technical_message] => amount is missing!
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:05.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [amount] => 100
    [currency] => CAD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[insta_debit_payout]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[320]>
    <technical_message content=[amount is missing!]>
    <message content=[Please check input data for errors!]>
    <timestamp content=[2021-02-04T15:26:05Z]>
    <amount content=[100]>
    <currency content=[CAD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "insta_debit_payout",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "320",
    technical_message: "amount is missing!",
    message: "Please check input data for errors!",
    timestamp: "2021-02-04T15:26:05Z",
    amount: "100",
    currency: "CAD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>insta_debit_payout</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>320</code>
  <technical_message>amount is missing!</technical_message>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:05Z</timestamp>
  <amount>100</amount>
  <currency>CAD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(30)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

ITAU

Itau is a real-time online bank transfer method and a virtual card.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\Itau');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rubble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Rio de Janeiro')
        ->setBillingCountry('BR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>itau</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <return_pending_url>http://www.example.com/pending</return_pending_url>
   <amount>100</amount>
   <currency>USD</currency>
   <consumer_reference>barney_rubble</consumer_reference>
   <national_id>8812128812</national_id>
   <birth_date>30-12-1992</birth_date>
   <customer_email>travis@example.com</customer_email>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Rio de Janeiro</city>
     <country>BR</country>
   </billing_address>
   <risk_params>
     <user_id>123456</user_id>
   </risk_params>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **itau**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	string(20)	Birth date of the customer
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address

Parameter	Required	Format	Description
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
BR

Successful Response

```
stdClass Object
(
    [transaction_type] => itau
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:06.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>itau</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:06Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => itau
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:06.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>itau</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:06Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

MULTIBANCO

Multibanco allows Portuguese shoppers to do payments through the Internet by using virtual credit cards

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\Multibanco');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Porto')
        ->setBillingCountry('PT')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>multibanco</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>EUR</currency>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Porto</city>
      <country>PT</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **multibanco**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	optional	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country code
PT

Successful Response

```
stdClass Object
(
    [transaction_type] => multibanco
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:06.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>multibanco</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:06Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => multibanco
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:06.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>multibanco</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:06Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

MYBANK

MyBank is an overlay banking system for Italy and Spain.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>my_bank</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>EUR</currency>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Rome</city>
      <country>IT</country>
    </billing_address>
  </payment_transaction>'
```

Request

```
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\PPRO');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('mybank')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('EUR')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Rome')
        ->setBillingCountry('IT');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.PProRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PProRequest request = new PProRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setPaymentType("mybank");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");


    // Billing Address
    request.setBillingFirstname("Barney");
    request.setBillingLastname("Rubble");
    request.setBillingPrimaryAddress("14, Nerazdelni str");
    request.setBillingZipCode("1407");
    request.setBillingCity("Rome");
    request.setBillingCountry("IT");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.ppro(
  {
    "transaction_id": "119643250547501c79d8295",
    "payment_type": "mybank",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "EUR",
    "billing_address": {
      "first_name": "Barney",
      "last_name": "Rubble",
      "address1": "14, Nerazdelni str",
      "zip_code": "1407",
      "city": "Rome",
      "country": "IT"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>ppro</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <payment_type>mybank</payment_type>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>EUR</currency>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Rome</city>
     <country>IT</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	**ppro** or **my_bank**. Contact tech support at tech-support@e-comprocessing.com for more details.
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_type	required[1]	ppro	MyBank. Contact tech support at tech-support@e-comprocessing.com for more details.
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

`1 - payment_type must be submitted only when the transaction type is set to ppro`

Supported currencies and countries

Currency code	Country code	Description
EUR	IT	for PPRO transaction type
EUR	IT, ES	for MyBank transaction type

Successful Response

```
stdClass Object
(
    [transaction_type] => ppro
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:06.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:06Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:06Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:06Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states

Parameter	Type	Description
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => ppro
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:06.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:06Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:06Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:06Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

ONLINE BANKING

Online Banking is an oBeP-style alternative payment method that allows you to pay directly with your ebank account. After initiating a transaction, the online banking will redirect you to their page. There you will find a list with available banks to finish the payment.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\OnlineBanking\Payin');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('50000')
        ->setCurrency('CNY')
        ->setCustomerEmail('travis@example.com')
        ->setBankCode('CITIC')
        ->setConsumerReference('Consumer Reference')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>online_banking</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>50000</amount>
    <currency>CNY</currency>
    <customer_email>travis@example.com</customer_email>
    <bank_code>CITIC</bank_code>
    <consumer_reference>Consumer Reference</consumer_reference>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **online_banking**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer

Parameter	Required	Format	Description
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
bank_code	required	bank code	Must contain Bank code
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
payment_type	required*	string	The payment type describes the type of online banking used to process the transaction. Must contain one of the allowedPayment types, but they may vary based on the specific setup. If omitted, transaction will be processed with**online_banking** payment_type if online_banking is a supported payment type. Otherwise, the transaction will be processed with the first available supported payment type.
virtual_payment_address	required*	string	Virtual Payment Address (VPA) of the customer, format: someone@bank
consumer_reference	required*	string	Virtual Payment Address (VPA) of the customer, format: someone@bank
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported currencies

Currency name	Currency code
China yen	CNY
Chilean Peso	CLP
Colombian Peso	COP
Indian rupee	INR
Indonesian rupiah	IDR
Malaysian ringgit	MYR
Paraguayan Guarani	PYG
Philippine peso	PHP
Singapore dollar	SGD
Thai baht	THB
Uruguayan Peso	UYU
Vietnamese dong	VND

PAYMENT TYPES

Payment Type Name	Payment Type Code
Online banking	online_banking
Quick payment	quick_payment
Qr payment	qr_payment
Netbanking	netbanking

Payment Type Name	Payment Type Code
Alipay QR	alipay_qr

Please, contact tech-support@e-comprocessing.com to find out more about which payment type to use with your setup.

BANK CODES

Bank codes may vary based on the specific setup.

For BRL currency:

Bank Name	Bank Code
Caixa	CA

For CHF currency:

Bank Name	Bank Code
Post Finance	PF

For CLP currency:

Bank Name	Bank Code
Servipag	SP

For CNY currency

Bank Name	Bank Code
Agricultural Bank of China	ABC
Bank of Beijing	BOB
Bank of China	BOC
Bank of Communications	BOCO
China Construction Bank	CCB
Bank for economic construction	CCD
China Everbright Bank	CEB
Industrial Bank	CIB
China Merchants Bank	CMB
China Minsheng Bank	CMBC
China Citic Bank	CITIC
Industrial and Commercial Bank of China	ICBC
China Guangfa Bank	GDB
Huaxia Bank	HXB
Pingan Bank	PINGANBANK
China Postal Savings Bank	PSBC
China Union Pay	QUICKPAY
Shanghai Bank	SHB
Shengzhen Ping An Bank	SPABANK
Shanghai Pudong Development Bank	SPDB
Yinlian Bank	YLB

For EUR currency:

Bank Name	Bank Code
Post Finance	PF

For IDR currency:

Bank Name	Bank Code
ALTO, Prima, ATM Bersama	ATMVA
Bank Central Asia	BCA_IDR
Bank Rakyat Indonesia	BRI_IDR
Bank Negara Indonesia	BNI_IDR
BTN Bank	BTN_IDR
CIMB Clicks Indonesia	CIMB_IDR
Danamon Bank	DMN_IDR
Mandiri Bank	MDR_IDR
Permata Bank	PMB_IDR
Virtual Account Bank	VA

For INR currency:

Bank Name	Bank Code
Aditya Birla Idea Payments Bank	ABPB
Airtel Payments Bank	AIRP
Allahabad Bank	ALLA
Andhra Bank	ANDB
Bank of Baroda - Retail Banking	BARB_R
Bank of Bahrein and Kuwait	BBKM
Dena Bank	BKDN
Bank of India	BKID
Central Bank of India	CBIN
City Union Bank	CIUB
Canara Bank	CNRB
Corporation Bank	CORP
Cosmos Co-operative Bank	COSB
Catholic Syrian Bank	CSBK
Development Bank of Singapore	DBSS
DCB Bank	DCBL
Deutsche Bank	DEUT
Dhanlaxmi Bank	DLXB
Equitas Small Finance Bank	ESFB
Federal Bank	FDRL
HDFC Bank	HDFC
IDBI	IBKL
ICICI Bank	ICIC
IDFC FIRST Bank	IDFB
Indian Bank	IDIB
Indusind Bank	INDB
Indian Overseas Bank	IOBA
Jammu and Kashmir Bank	JAKA
Janata Sahakari Bank (Pune)	JSBP
Karnataka Bank	KARB
Kotak Mahindra Bank	KKBK

Bank Name	Bank Code
Karur Vysya Bank	KVBL
Lakshmi Vilas Bank - Corporate Banking	LAVB_C
Lakshmi Vilas Bank - Retail Banking	LAVB_R
Bank of Maharashtra	MAHB
NKGSB Co-operative Bank	NKGS
Oriental Bank of Commerce	ORBC
Punjab & Maharashtra Co-operative Bank	PMCB
Punjab & Sind Bank	PSIB
Punjab National Bank - Retail Banking	PUNB_R
RBL Bank	RATN
State Bank of Bikaner and Jaipur	SBBJ
State Bank of Hyderabad	SBHY
State Bank of India	SBIN
State Bank of Mysore	SBMY
State Bank of Travancore	SBTR
Standard Chartered Bank	SCBL
South Indian Bank	SIBL
Saraswat Co-operative Bank	SRCB
State Bank of Patiala	STBP
Shamrao Vithal Co-operative Bank	SVCB
Syndicate Bank	SYNB
Tamilnadu Mercantile Bank	TMBL
Tamilnadu State Apex Co-operative Bank	TNSC
Union Bank of India	UBIN
UCO Bank	UCBA
United Bank of India	UTBI
Axis Bank	UTIB
Vijaya Bank	VIJB
Yes Bank	YESB

For MXN currency:

Bank Name	Bank Code
Spei	SE
Banorte	BQ

For MYR currency:

Bank Name	Bank Code
7-eleven stores	CASH-711
Affin Bank	FPX_ABB, AFFIN-EPG
Alliance Bank	FPX_ABMB
Am Online	FPX_AMB, AMB-W2W
Bank Islam	FPX_BIMB, BANKISLAM
Bank Muamalat	FPX_BMMB
Bank Rakyat	FPX_BKRM

Bank Name	Bank Code
Bank Simpanan Nasional	FPX_BSN
CIMB Clicks Bank	CIMB_MYR, FPX_CIMBCLICKS, CIMB-CLICKS
FPX	FPX
HLB Connect	FPX_HLB, HLB-ONL
Hong Leong Bank	HLE_MYR
jmpay	jompay.php
Kuwait Finance House	FPX_KFN
May Bank	MAY_MYR
Maybank2u	FPX_MB2U, MB2U
OCBC Bank	FPX_OCBC
PBeBank	FPX_PBB, PUBLICKBANK
Public Bank	PBE_MYR
RHB Bank	RHB_MYR
RHB Now	FPX_RHB, RHB-ONL
Stand Chart Bank	FPX_SCB
UOB Bank	FPX_UOB

For PEN currency:

Bank Name	Bank Code
BCP	BC
Interbank	IB
Pago Efectivo	EF
BBVA	BP

For PYG currency:

Bank Name	Bank Code
PagoExpress	PE

For THB currency:

Bank Name	Bank Code
Bangkok Bank	BBL_THB, TH_PB_BBLPN
Kasikorn Bank	KKB_THB
Krungsri (Bank of Ayudhya Public Company Limited)	BAY_THB, TH_PB_BAYPN
Krung Thai Bank	KTB_THB, TH_PB_KTBPN
OMISE_TL	OMISE_TL.php
Siam Commercial Bank	SCB_THB, TH_PB_SCBPN
UOBT	UOB_THB

For USD currency:

Bank Name	Bank Code
Santander	SN
Itau	IT
Bradesco	BR
Banco do Brasil	BB
Webpay	WP
Bancomer	BN

Bank Name	Bank Code
PSE	PS
Banco de Occidente	BO

For UYU currency:

Bank Name	Bank Code
Abitab	AI

For PHP currency:

Bank Name	Bank Code
Dragonpay	DRAGONPAY

For SGD currency:

Bank Name	Bank Code
SG eNETS	ENETS-D
singpost	singpost.php

For VND currency:

Bank Name	Bank Code
VTC-Pay	VTCP_VPBANK
VTC-Pay ABBANK	VTCP_ABBANK
VTC-Pay ACB	VTCP_ACB
VTC-Pay Agribank	VTCP_AGRIBANK
VTC-Pay BACABANK	VTCP_BACABANK
VTC-Pay BIDV	VTCP_BIDV
VTC-Pay BVB	VTCP_BVB
VTC-Pay DongABank	VTCP_DONGABANK
VTC-Pay Eximbank	VTCP_EXIMBANK
VTC-Pay GPBank	VTCP_GPBANK
VTC-Pay HDBank	VTCP_HDBANK
VTC-Pay LienVietPostBank	VTCP_LVPB
VTC-Pay MB	VTCP_MB
VTC-Pay MaritimeBank	VTCP_MARITIMEBANK
VTC-Pay NamABank	VTCP_NAMABANK
VTC-Pay Navibank	VTCP_NAVIBANK
VTC-Pay Oceanbank	VTCP_OCEANBANK
VTC-Pay PGBank	VTCP_PGBANK
VTC-Pay PHUONGDONG	VTCP_PHUONGDONG
VTC-Pay SHB	VTCP_SHB
VTC-Pay Sacombank	VTCP_SACOMBANK
VTC-Pay SaigonBank	VTCP-SAIGON_BANK
VTC-Pay SeaABank	VTCP_SEAABANK
VTC-Pay Techcombank	VTCP_TECHCOMBANK
VTC-Pay TienPhong Bank	VTCP_TIENPHONGBANK
VTC-Pay VIB	VTCP_VIB
VTC-Pay VietABank	VTCP_VIETABANK
VTC-Pay Vietcombank	VTCP_VIETCOMBANK

Bank Name	Bank Code
VTC-Pay Vietinbank	VTCP_VIETINBANK

Successful Response

```
stdClass Object
(
    [transaction_type] => online_banking
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:06.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 50000
    [currency] => CNY
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>online_banking</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:06Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>50000</amount>
  <currency>CNY</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => online_banking
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [technical_message] => amount is missing
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:06.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 50000
    [currency] => CNY
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>online_banking</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <technical_message>amount is missing</technical_message>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:06Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>50000</amount>
  <currency>CNY</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

P24

P24 transactions are only asynchronous. After a successful validation of transaction parameters, transaction status is set to pending async and the user is redirected to the P24 payment page where he enters additional information to finish the payment. When the payment reaches a final state, Genesis gateway sends a notification to the merchant.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\P24');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')
        ->setBankCode('')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.P24Request;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    P24Request request = new P24Request();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");
    request.setBankCode("");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.p24(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "USD",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "bank_code": null,
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>p24</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>USD</currency>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <payment_transaction>bank_code</payment_transaction>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **p24**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
bank_code	optional	integer	Must be one of the supportedBank codes
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada

Parameter	Required	Format	Description
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

BANK CODES

Bank codes may vary depending on the gateway configuration, please contacttech-support@e-comprocessing.com for further clarifications.

For EUR and PLN currencies:

Bank Name	Bank Code
BLIK - PSP	154
EuroBank	94
Przekaz tradycyjny	178
Przekaz/Przelew tradycyjny	1000
Płac̨e z IKO	135
Płac̨e z Orange	146
Raiffeisen Bank PBL	102
U˙zyj przedpłaty	177
mBank-mTransfer	25

Successful Response

```
stdClass Object
(
    [transaction_type] => p24
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:07.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[p24]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:07Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "p24",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:07Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>p24</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:07Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response


```
stdClass Object
(
    [transaction_type] => p24
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:07.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```xml
<payment_response content=[
    <transaction_type content=[p24]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:07Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```json
{
    transaction_type: "p24",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:07Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>p24</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:07Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

PAYU

PayU is a payment method for Czech Republic and Poland

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\PayU');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('PLN')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Krakov')
        ->setBillingCountry('PL')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>payu</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>PLN</currency>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Krakov</city>
      <country>PL</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **payu**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer

Parameter	Required	Format	Description
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	optional	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required	string(255)	Customer first name
last_name	required	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported currencies and countries:

Currency code	Country code
CZK	CZ
PLN	PL

Successful Response

```
stdClass Object
(
    [transaction_type] => payu
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:07.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => PLN
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>payu</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:07Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>PLN</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => payu
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:07.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => PLN
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>payu</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:07Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>PLN</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

POLI

POLi payment is Australia's most popular online banking. The payment method is available within Australia and New Zealand. POLi transactions are asynchronous. After successful validation of transaction parameters, transaction status is set to pending async, the user is redirected to POLi authentication page where he enters additional information to finish the payment. When the payment reaches a final state Genesis gateway sends a notification to the merchant on the URL sent in the request or the URL configured in their account.

Note, in some rare cases, the POLi system might not be able to confirm whether the user's payment is successful. In this case, the funds may have been transferred but the user will not be displayed a receipt from POLi or the merchant. This status can arise due to a bank issue or a local issue to the user.

Therefore, POLi payments recommendation is for merchants to ensure that when end-user clicks on "Return to merchant's website", they land on a page that displays a clear message asking them to check their bank account before processing another transaction to make sure funds have not left the account.

This will reduce the chances of duplicate transactions.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\POLi');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('AUD')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Sofia')
        ->setBillingCountry('AU')
        ->setBillingState('AC');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.POLiRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    POLiRequest request = new POLiRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("AUD");


    // Billing Address
    request.setBillingFirstname("Barney");
    request.setBillingLastname("Rubble");
    request.setBillingPrimaryAddress("14, Nerazdelni str");
    request.setBillingZipCode("1407");
    request.setBillingCity("Sofia");
    request.setBillingCountry("AU");
    request.setBillingState("AC");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.poli(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "AUD",
    "billing_address": {
      "first_name": "Barney",
      "last_name": "Rubble",
      "address1": "14, Nerazdelni str",
      "zip_code": "1407",
      "city": "Sofia",
      "country": "AU",
      "state": "AC"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>poli</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>AUD</currency>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Sofia</city>
      <country>AU</country>
      <state>AC</state>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **poli**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name

Parameter	Required	Format	Description
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported bank countries:

Country name	Country code
Australia	AU
New Zealand	NZ

Supported currencies:

Currency name	Currency code
Australian dollar	AUD
New Zealand dollar	NZD

Successful Response

```
stdClass Object
(
    [transaction_type] => poli
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:07.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => AUD
    [sent_to_acquirer] => true
)
```

```xml
<payment_response content=[
    <transaction_type content=[poli]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:07Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[AUD]>
    <sent_to_acquirer content=[true]>
]>
```

```json
{
    transaction_type: "poli",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:07Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "AUD",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>poli</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:07Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>AUD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => poli
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:07.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => AUD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[poli]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:07Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[AUD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "poli",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:07Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "AUD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>poli</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:07Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>AUD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z

Parameter	Type	Description
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

PSE (PAGOS SEGUROS EN LINEA)

PSE (Pagos Seguros en Linea) is the preferred alternative payment solution in Colombia.The solution consists of an interface that offers the client the option to pay for their online purchases in cash, directing it to their online banking.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\Pse');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Bogota')
        ->setBillingCountry('CO')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>pse</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <return_pending_url>http://www.example.com/pending</return_pending_url>
   <amount>100</amount>
   <currency>USD</currency>
   <consumer_reference>barney_rumble</consumer_reference>
   <national_id>8812128812</national_id>
   <birth_date>30-12-1992</birth_date>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Bogota</city>
     <country>CO</country>
   </billing_address>
   <risk_params>
     <user_id>123456</user_id>
   </risk_params>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **pse**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code

Parameter	Required	Format	Description
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
CO

Successful Response

```
stdClass Object
(
    [transaction_type] => pse
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:07.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>pse</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:07Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details

Parameter	Type	Description
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => pse
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:07.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>pse</transaction_type>
  <status>error</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:07Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

POST FINANCE

PostFinance is an online banking provider in Switzerland

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>post_finance</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <return_pending_url>http://www.example.com/pending</return_pending_url>
   <amount>100</amount>
   <currency>EUR</currency>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Graz</city>
     <country>AT</country>
   </billing_address>
   <risk_params>
     <user_id>123456</user_id>
   </risk_params>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **post_finance**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code

Parameter	Required	Format	Description
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported currencies and countries:

Currency code	Country code
EUR	CH
CHF	CH

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>post_finance</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:08Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
  <post_finance_transaction_id>438</post_finance_transaction_id>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
post_finance_transaction_id	string(255)	The Post Finance transaction ID

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <payment_transaction>transaction_type</payment_transaction>
  <payment_transaction>status</payment_transaction>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <payment_transaction>code</payment_transaction>
  <payment_transaction>message</payment_transaction>
  <timestamp>2021-02-04T15:26:08Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <payment_transaction>sent_to_acquirer</payment_transaction>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

RAPIPAGO

RapiPago from Argentina is an offline payment method used for online purchases. Shoppers buy their goods and services online and pay offline at one of the 6,000+ RapiPago payment locations.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\Rapipago');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Buenos Aires')
        ->setBillingCountry('AR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>rapi_pago</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rumble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Buenos Aires</city>
      <country>AR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **rapi_pago**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
AR

Successful Response

```
stdClass Object
(
    [transaction_type] => rapi_pago
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:08.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>rapi_pago</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:08Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => rapi_pago
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:08.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>rapi_pago</transaction_type>
  <status>error</status>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:08Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

SAFETYPAY

Safetypay is a real-time bank transfer system that operates in more than 10 different countries. Their main market is in Latin America.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\SafetyPay');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('safetypay')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('')
        ->setNationalId('')
        ->setBirthDate('')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Tampico')
        ->setBillingCountry('MX')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>safetypay</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <payment_type>safetypay</payment_type>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>USD</currency>
    <payment_transaction>consumer_reference</payment_transaction>
    <payment_transaction>national_id</payment_transaction>
    <payment_transaction>birth_date</payment_transaction>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Tampico</city>
      <country>MX</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\PPRO');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('safetypay')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('')
        ->setNationalId('')
        ->setBirthDate('')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Tampico')
        ->setBillingCountry('MX')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.PProRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PProRequest request = new PProRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setPaymentType("safetypay");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setConsumerReference("");
    request.setNationalId("");
    request.setBirthDate("");
    request.setCustomerEmail("travis@example.com");


    // Billing Address
    request.setBillingFirstname("Barney");
    request.setBillingLastname("Rubble");
    request.setBillingPrimaryAddress("14, Nerazdelni str");
    request.setBillingZipCode("1407");
    request.setBillingCity("Tampico");
    request.setBillingCountry("MX");


    // Risk Params
    request.setRiskUserId("123456");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.ppro(
  {
    "transaction_id": "119643250547501c79d8295",
    "payment_type": "safetypay",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "USD",
    "consumer_reference": null,
    "national_id": null,
    "birth_date": null,
    "customer_email": "travis@example.com",
    "billing_address": {
      "first_name": "Barney",
      "last_name": "Rubble",
      "address1": "14, Nerazdelni str",
      "zip_code": "1407",
      "city": "Tampico",
      "country": "MX"
    },
    "risk_params": {
      "user_id": "123456"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>ppro</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <payment_type>safetypay</payment_type>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <payment_transaction>consumer_reference</payment_transaction>
    <payment_transaction>national_id</payment_transaction>
    <payment_transaction>birth_date</payment_transaction>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Tampico</city>
      <country>MX</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	**ppro** or **safetypay**. Contact tech support at tech-support@e-comprocessing.com for more details.
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_type	required[1]	safetypay	SafetyPay. Contact tech support for more details
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment

Parameter	Required	Format	Description
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

`1 - payment_type must be submitted only when the transaction type is set to ppro`

Supported countries:

Country
AT
BE
BR
CL
CO
DE
EC
ES
MX
NL
PE
PR

Supported currencies:

Currency Code
EUR
USD

Successful Response

```
stdClass Object
(
    [transaction_type] => safetypay
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:08.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```


```
This request is not implemented yet
```

```
This request is not implemented yet
```


```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>safetypay</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:08Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response


```
stdClass Object
(
    [transaction_type] => ppro
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:08.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```



```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:08Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:08Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:08Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro/safetypay</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:08Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

SANTANDER

Santander is an online bank transfer for ecommerce purchases. Consumers use their trusted home banking environment, merchants benefit from payment guarantee and swift settlement.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\Santander');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rubble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Rio de Janeiro')
        ->setBillingCountry('BR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>santander</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rubble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Rio de Janeiro</city>
      <country>BR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **santander**

Parameter	Required	Format	Description
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	string(20)	Birth date of the customer
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
AR
BR
MX
CL

Successful Response

```
stdClass Object
(
    [transaction_type] => santander
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:08.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>santander</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:08Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => santander
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:08.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>santander</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:08Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

SDD INIT RECURRING SALE

An SddInitRecurringSale transaction initializes a recurring payment and is equal to a normal SddSaleTransaction except that it can be referenced as "initial" transaction in a SddRecurringSale transaction.

Note that if an SddInitRecurringSale is fully refunded, the recurring series is stopped and no more SddRecurringSales can be performed for that recurring series.

If an SddInitRecurringSale is partially refunded, the recurring series can continue with more SddRecurringSales.

> Authorize transactions are also available as 3dsecure transactions

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\SDD\Recurring\InitRecurringSale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setIban('DE09100100101234567891')
        ->setBic('PBNKDEFFXXX')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingCountry('DE');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.sdd.SDDInitRecurringSaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SDDInitRecurringSaleRequest request = new SDDInitRecurringSaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");
    request.setIban("DE09100100101234567891");
    request.setBic("PBNKDEFFXXX");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingCountry("DE");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sdd_init_recurring_sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "EUR",
    "iban": "DE09100100101234567891",
    "bic": "PBNKDEFFXXX",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "country": "DE"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sdd_init_recurring_sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>EUR</currency>
    <iban>DE09100100101234567891</iban>
    <bic>PBNKDEFFXXX</bic>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <country>DE</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **sdd_init_recurring_sale**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
iban	required	string(34)	Customer's IBAN number
bic	optional	string(11)	SWIFT/BIC code of the customer's bank
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required	string(255)	Customer first name
last_name	required	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City

Parameter	Required	Format	Description
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country Name	Country Code
Austria	AT
Belgium	BE
Cyprus	CY
Estonia	EE
Finland	FI
France	FR
Germany	DE
Greece	GR
Ireland	IE
Italy	IT
Latvia	LV
Lithuania	LT
Luxembourg	LU
Malta	MT
Monaco	MC
Netherlands	NL
Portugal	PT
Slovakia	SK
San Marino	SM
Slovenia	SI
Spain	ES

Successful Response

```
stdClass Object
(
    [transaction_type] => sdd_init_recurring_sale
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:09.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[sdd_init_recurring_sale]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:09Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "sdd_init_recurring_sale",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:09Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sdd_init_recurring_sale</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:09Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway

Parameter	Type	Description
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => sdd_init_recurring_sale
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:09.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[sdd_init_recurring_sale]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Please check input data for errors!]>
    <timestamp content=[2021-02-04T15:26:09Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "sdd_init_recurring_sale",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Please check input data for errors!",
    timestamp: "2021-02-04T15:26:09Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sdd_init_recurring_sale</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:09Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)

Parameter	Type	Description
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

SDD RECURRING SALE

A SddRecurringSale transaction is a ”repeated” transaction which follows and references a SddInitRecurringSale transaction.

The bank account data is omitted.

Note that SddRecurringSales can be partially or fully refunded if configuration allows it, and this will not stop the sdd recurring series.

Request

```
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\SDD\Recurring\RecurringSale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setReferenceId('2ee4287e67971380ef7f97d5743bb523');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.sdd.SDDRecurringSaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SDDRecurringSaleRequest request = new SDDRecurringSaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");
    request.setReferenceId("2ee4287e67971380ef7f97d5743bb523");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sdd_recurring_sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "EUR",
    "reference_id": "2ee4287e67971380ef7f97d5743bb523"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sdd_recurring_sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>EUR</currency>
    <reference_id>2ee4287e67971380ef7f97d5743bb523</reference_id>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **sdd_recurring_sale**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	Unique id returned by corresponding transaction

Parameter	Required	Format	Description
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => sdd_recurring_sale
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:09.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[sdd_recurring_sale]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:09Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "sdd_recurring_sale",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:09Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sdd_recurring_sale</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:09Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant

Parameter	Type	Description
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => sdd_recurring_sale
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 320
    [technical_message] => amount is missing!
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:09.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
)
```

```
<payment_response content=[
    <transaction_type content=[sdd_recurring_sale]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[320]>
    <technical_message content=[amount is missing!]>
    <message content=[Please check input data for errors!]>
    <timestamp content=[2021-02-04T15:26:09Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
]>
```

```
{
    transaction_type: "sdd_recurring_sale",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "320",
    technical_message: "amount is missing!",
    message: "Please check input data for errors!",
    timestamp: "2021-02-04T15:26:09Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
}
```

```
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sdd_recurring_sale</transaction_type>
    <status>error</status>
    <mode>live</mode>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
    <code>320</code>
    <technical_message>amount is missing!</technical_message>
    <message>Please check input data for errors!</message>
    <timestamp>2021-02-04T15:26:09Z</timestamp>
    <descriptor>Descriptor one</descriptor>
    <amount>100</amount>
    <currency>EUR</currency>
  </payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

SDD REFUND

SddRefunds allow to return already billed amounts to customers.

The amount can be fully refunded only, no partial refunds are allowed. Note that SDD refunds can only be done on former approved SDD transactions

Therefore, the reference_id for the corresponding transaction is mandatory.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\SDD\Refund');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setReferenceId('2ee4287e67971380ef7f97d5743bb523');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.sdd.SDDRefundRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SDDRefundRequest request = new SDDRefundRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");
    request.setReferenceId("2ee4287e67971380ef7f97d5743bb523");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sdd_refund(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "amount": "100",
    "currency": "EUR",
    "reference_id": "2ee4287e67971380ef7f97d5743bb523"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sdd_refund</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <amount>100</amount>
    <currency>EUR</currency>
    <reference_id>2ee4287e67971380ef7f97d5743bb523</reference_id>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **sdd_refund**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required	string(255)	Description of the transaction for later use.
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
reference_id	required	string(32)	Unique id returned by corresponding transaction

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => sdd_refund
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:09.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[sdd_refund]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:09Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "sdd_refund",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:09Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sdd_refund</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:09Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => sdd_refund
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 320
    [technical_message] => amount is missing!
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:09.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[sdd_refund]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[320]>
    <technical_message content=[amount is missing!]>
    <message content=[Please check input data for errors!]>
    <timestamp content=[2021-02-04T15:26:09Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "sdd_refund",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "320",
    technical_message: "amount is missing!",
    message: "Please check input data for errors!",
    timestamp: "2021-02-04T15:26:09Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sdd_refund</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>320</code>
  <technical_message>amount is missing!</technical_message>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:09Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

SDD SALE

The status of Sepa Direct Debit transactions is not available right after a transaction is made. Merchants receive the status of SDD transaction at 8:30 am (CET), 10:30 am (CET), 3:30 pm (CET) and 7:30 pm (CET). The merchant should have enabled notifications

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\SDD\Sale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setIban('DE09100100101234567891')
        ->setBic('PBNKDEFFXXX')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingCountry('DE');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.sdd.SDDSaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SDDSaleRequest request = new SDDSaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");
    request.setIban("DE09100100101234567891");
    request.setBic("PBNKDEFFXXX");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingCountry("DE");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sdd_sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "EUR",
    "iban": "DE09100100101234567891",
    "bic": "PBNKDEFFXXX",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "country": "DE"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>sdd_sale</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>EUR</currency>
   <iban>DE09100100101234567891</iban>
   <bic>PBNKDEFFXXX</bic>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <country>DE</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **sdd_sale**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
iban	required	string(34)	Customer's IBAN number
bic	optional	string(11)	SWIFT/BIC code of the customer's bank
billing_address	required		See Required vs Optional API params for details
first_name	required	string(255)	Customer first name
last_name	required	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

**Supported countries: **

The supported countries are the same as SDD Init Recurring Sale.

Successful Response

```
stdClass Object
(
    [transaction_type] => sdd_sale
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:09.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[sdd_sale]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:09Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "sdd_sale",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:09Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sdd_sale</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:09Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway

Parameter	Type	Description
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => sdd_sale
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [message] => expiration_year is invalid
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:09.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[sdd_sale]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <message content=[expiration_year is invalid]>
    <timestamp content=[2021-02-04T15:26:09Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "sdd_sale",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "340",
    message: "expiration_year is invalid",
    timestamp: "2021-02-04T15:26:09Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sdd_sale</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <message>expiration_year is invalid</message>
  <timestamp>2021-02-04T15:26:09Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)

Parameter	Type	Description
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

SOFORT

Sofort transactions are only asynchronous. After a successful validation of transaction parameters, transaction status is set to **pending_async**, the user is redirected to Sofort authentication page where he enters additional information to finish the payment. When payment is still waiting for final state, it's state is set to **pending_hold**. As soon as the payment reaches a final state Genesis gateway sends notification to merchant on the configured url into its account.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\Sofort');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Berlin')
        ->setBillingCountry('DE');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.SofortRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SofortRequest request = new SofortRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setReturnPendingUrl(new URL("http://www.example.com/pending"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");
    request.setCustomerEmail("travis@example.com");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Berlin");
    request.setBillingCountry("DE");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sofort(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "return_pending_url": "http://www.example.com/pending",
    "amount": "100",
    "currency": "EUR",
    "customer_email": "travis@example.com",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Berlin",
      "country": "DE"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>sofort</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <return_pending_url>http://www.example.com/pending</return_pending_url>
   <amount>100</amount>
   <currency>EUR</currency>
   <customer_email>travis@example.com</customer_email>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Berlin</city>
     <country>DE</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **sofort**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
iban	optional	string(24)	International bank account number of the customer
bic	optional	string(12)	Bank Identifier Code
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City

Parameter	Required	Format	Description
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country name	Country code
Austria	AT
Belgium	BE
Germany	DE
Italy	IT
Netherlands	NL
Poland	PL
Spain	ES
Switzerland	CH

Successful Response

```
stdClass Object
(
    [transaction_type] => sofort
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:09.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[sofort]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:09Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "sofort",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:09Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sofort</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:09Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response


```
stdClass Object
(
    [transaction_type] => sofort
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:10.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```



```
<payment_response content=[
    <transaction_type content=[sofort]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:10Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "sofort",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:10Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sofort</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:10Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

TRUSTLY SALE

Trustly is an oBeP-style alternative payment method that allows you to pay directly with your ebank account.

After initiating a transaction, Trustly will redirect the consumer to Trustly bank page. There the consumer will have to select his/her bank and log in with the regular access codes, choose the account and complete payment.

Account_ID parameter will be returned to the merchant notification url. **Account_ID** identifies each user's bank account once it is processed through Trustly system, it can be stored by the merchant and further used as a reference on the Bank-Pay-out call.

> When using your own hosted payment form, please follow Trustly requirements on services presentation and branding. Please contact your AM or our Technical team.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\Trustly\Sale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnSuccessUrlTarget('self')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Max')
        ->setBillingLastName('Mustermann')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Berlin')
        ->setBillingCountry('DE')
        ->setUserId('')
        ->setAccountId('');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.TrustlySaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    TrustlySaleRequest request = new TrustlySaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setPaymentType("");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setReturnSuccessUrlTarget("self");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");
    request.setCustomerEmail("travis@example.com");


    // Billing Address
    request.setBillingFirstname("Max");
    request.setBillingLastname("Mustermann");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Berlin");
    request.setBillingCountry("DE");
    request.setUserId("");
    request.setAccountId("");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.trustly_sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "payment_type": null,
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "return_success_url_target": "self",
    "amount": "100",
    "currency": "EUR",
    "customer_email": "travis@example.com",
    "billing_address": {
      "first_name": "Max",
      "last_name": "Mustermann",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Berlin",
      "country": "DE"
    },
    "user_id": null,
    "account_id": null
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>trustly_sale</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <payment_transaction>payment_type</payment_transaction>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <notification_url>https://www.example.com/notification</notification_url>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <return_success_url_target>self</return_success_url_target>
   <amount>100</amount>
   <currency>EUR</currency>
   <customer_email>travis@example.com</customer_email>
   <billing_address>
     <first_name>Max</first_name>
     <last_name>Mustermann</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Berlin</city>
     <country>DE</country>
   </billing_address>
   <payment_transaction>user_id</payment_transaction>
   <payment_transaction>account_id</payment_transaction>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **trustly_sale**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_success_url_target	optional	string(255)	URL target for successful payment in Trustly iFrame. Possible values:**self**, **parent**, **top**.
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
user_id	required*	string(255)	Unique user identifier defined by merchant in their own system. ID, username, hash or anything uniquely identifying the consumer requesting the deposit. Must be static per each consumer for any type of transaction where this consumer is involved (trustly_sale, bank pay_out, register_account, select account).
birth_date	optional	dd-mm-yyyy	Date of birth of the beneficiary, or organisational number for the organisation.
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
account_id	required	string(255)	Unique user Account identifier at Trustly system, which is used to process a Bank Pay-out call to the consumer, without reference to initial deposit transaction. You will receive this after Trustly_Sale and Select Account call on your notification URL. You will receive this as a response on Trustly Register Account option.

`required* = conditionally required`

Supported countries:

Country name	Country code
Austria	AT
Belgium	BE
Czech Republic	CZ
Denmark	DK
Estonia	EE
Finland	FI
Germany	DE
Latvia	LV
Lithuania	LT
Netherlands	NL
Norway	NO
Poland	PL
Slovakia	SK
Spain	ES
Sweden	SE
United Kingdom	GB

Successful Response

```
stdClass Object
(
    [transaction_type] => trustly_sale
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:10.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[trustly_sale]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:10Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "trustly_sale",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:10Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>trustly_sale</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:10Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response


```
stdClass Object
(
    [transaction_type] => trustly_sale
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:10.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```xml
<payment_response content=[
    <transaction_type content=[trustly_sale]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:10Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```json
{
    transaction_type: "trustly_sale",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:10Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>trustly_sale</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:10Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

TRUSTPAY

TrustPay is a real-time bank transfer payment service, which is widely used in the Czech Republic and Slovakia.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>trustpay</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>EUR</currency>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Prague</city>
      <country>CZ</country>
    </billing_address>
  </payment_transaction>'
```

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\PPRO');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('trustpay')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('EUR')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Prague')
        ->setBillingCountry('CZ');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.apm.PProRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PProRequest request = new PProRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setPaymentType("trustpay");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");


    // Billing Address
    request.setBillingFirstname("Barney");
    request.setBillingLastname("Rubble");
    request.setBillingPrimaryAddress("14, Nerazdelni str");
    request.setBillingZipCode("1407");
    request.setBillingCity("Prague");
    request.setBillingCountry("CZ");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.ppro(
  {
    "transaction_id": "119643250547501c79d8295",
    "payment_type": "trustpay",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "amount": "100",
    "currency": "EUR",
    "billing_address": {
      "first_name": "Barney",
      "last_name": "Rubble",
      "address1": "14, Nerazdelni str",
      "zip_code": "1407",
      "city": "Prague",
      "country": "CZ"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>ppro</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <payment_type>trustpay</payment_type>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>EUR</currency>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Prague</city>
     <country>CZ</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	**ppro** or **trustpay**. Contact tech support at tech-support@e-comprocessing.com for more details.
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_type	required[1]	ppro	TrustPay. Contact tech support at tech-support@e-comprocessing.com for more details.
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

`1 - payment_type must be submitted only when the transaction type is set to ppro`

Supported countries

Country code
CZ
SK

Supported currencies

Currency code
CZK
EUR

Successful Response

```
stdClass Object
(
    [transaction_type] => ppro
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:10.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:10Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:10Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:10Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => ppro
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:10.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[ppro]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[110]>
    <message content=[Something went wrong, please contact support!]>
    <timestamp content=[2021-02-04T15:26:10Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "ppro",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "110",
    message: "Something went wrong, please contact support!",
    timestamp: "2021-02-04T15:26:10Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ppro</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:10Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

UPI

UPI (Unified Payment Interface) transaction is an alternative payment method which allows users to transfer money between bank accounts.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>upi</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <notification_url>https://www.example.com/notification</notification_url>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>50000</amount>
   <currency>INR</currency>
   <customer_email>travis@example.com</customer_email>
   <virtual_payment_address>someone@bank</virtual_payment_address>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **upi**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
virtual_payment_address	required	string(255)	Virtual Payment Address (VPA) of the customer, format: someone@bank
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166

`required* = conditionally required`

Virtual payment address is used and required for Unified Payment Interface (UPI) transactions.

Supported currencies

Currency name	Currency code
Indian rupee	INR

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>upi</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:10Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>50000</amount>
  <currency>INR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>upi</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <technical_message>amount is missing</technical_message>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:10Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>50000</amount>
  <currency>INR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Parameter	Type	Description
sent_to_acquirer	string(255)	"true" or "false"

WEBPAY

Webpay is a Chilean real-time bank transfer method.

This transaction type is refundable via Refund transaction.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\Webpay');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('john_doe')
        ->setNationalId('8812128812')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Santiago')
        ->setBillingCountry('CL');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>webpay</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <return_pending_url>http://www.example.com/pending</return_pending_url>
   <amount>100</amount>
   <currency>USD</currency>
   <consumer_reference>john_doe</consumer_reference>
   <national_id>8812128812</national_id>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Santiago</city>
     <country>CL</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **webpay**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code

Parameter	Required	Format	Description
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries

Country Name	Country code
Chile	CL

Successful Response

```
stdClass Object
(
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:11.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:11Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:11.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <status>error</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:11Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

DAVIVIENDA

Davivienda is offering the Bill pay service which is a fast, easy and secure way to pay and manage your bills online to anyone, anytime in Colombia.

This transaction type is refundable via Refund transaction.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\Davivienda');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnPendingUrl('http://www.example.com/pending')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('barney@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Bogota')
        ->setBillingCountry('CO')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>davivienda</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_pending_url>http://www.example.com/pending</return_pending_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rumble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>barney@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Bogota</city>
      <country>CO</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **davivienda**

Parameter	Required	Format	Description
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
return_pending_url	optional	url	URL where customer is sent to when asynchronous payment is pending confirmation
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
CO

Successful Response

```
stdClass Object
(
    [transaction_type] => davivienda
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:11.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>davivienda</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:11Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => davivienda
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:11.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>davivienda</transaction_type>
  <status>error</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:11Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Cash Payments

BALOTO

Baloto is a cash payment option in Colombia. It allows the customers to receive a voucher at check-out. The voucher can then be paid in any of the Via Boleto offices in cash.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\CashPayments\Baloto');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rubble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Bogota')
        ->setBillingCountry('CO')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>baloto</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rubble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Bogota</city>
      <country>CO</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **baloto**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	string(20)	Birth date of the customer
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
CO

Successful Response

```
stdClass Object
(
    [transaction_type] => baloto
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:11.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>baloto</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:11Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => baloto
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:11.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>baloto</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:11Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

BANCO DE OCCIDENTE

Banco de Occidente is a cash payment method for Colombia

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\CashPayments\BancoDeOccidente');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Bogota')
        ->setBillingCountry('CO')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>banco_de_occidente</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Bogota</city>
      <country>CO</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **banco_de_occidente**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.

Parameter	Required	Format	Description
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	string(20)	Birth date of the customer
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
CO

Successful Response

```
stdClass Object
(
    [transaction_type] => banco_de_occidente
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:11.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>banco_de_occidente</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:11Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => banco_de_occidente
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:12.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>banco_de_occidente</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:12Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

BOLETO

Boleto is a payment service in Brazil

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\CashPayments\Boleto');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rubble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Rio de Janeiro')
        ->setBillingCountry('BR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>boleto</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rubble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Rio de Janeiro</city>
      <country>BR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **boleto**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	string(20)	Birth date of the customer
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
BR

Successful Response

```
stdClass Object
(
    [transaction_type] => boleto
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:12.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>boleto</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:12Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => boleto
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:12.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>boleto</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:12Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

EFECTY

Efecty is a cash-based payment method.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\CashPayments\Efecty');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('barney@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Bogota')
        ->setBillingCountry('CO')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>efecty</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rumble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>barney@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Bogota</city>
      <country>CO</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **efecty**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
CO

Successful Response

```
stdClass Object
(
    [transaction_type] => efecty
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:12.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>efecty</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:12Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => efecty
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:12.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>efecty</transaction_type>
  <status>error</status>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:12Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

OXXO

OXXO is the preferred payment method in Mexico. It is a cash payment via a barcode document thats accepted in more than 14,000 stores.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\CashPayments\Oxxo');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('barney@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Mexico City')
        ->setBillingCountry('MX')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>oxxo</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rumble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>barney@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Mexico City</city>
      <country>MX</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **oxxo**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
MX

Successful Response

```
stdClass Object
(
    [transaction_type] => oxxo
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:12.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>oxxo</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:12Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => oxxo
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:12.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>oxxo</transaction_type>
  <status>error</status>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:12Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

PAGO FACIL

Pago Facil is a cash-based payment used for online purchases.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\CashPayments\PagoFacil');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rumble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('barney@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Buenos Aires')
        ->setBillingCountry('AR')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>pago_facil</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rumble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>barney@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Buenos Aires</city>
      <country>AR</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **pago_facil**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
AR

Successful Response

```
stdClass Object
(
    [transaction_type] => pago_facil
    [status] => pending_async
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:12.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>pago_facil</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:12Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => pago_facil
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:13.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>pago_facil</transaction_type>
  <status>error</status>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:13Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

REDPAGOS

Redpagos is a cash payment in Uruguay

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\CashPayments\Redpagos');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerReference('barney_rubble')
        ->setNationalId('8812128812')
        ->setBirthDate('30-12-1992')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Barney')
        ->setBillingLastName('Rubble')
        ->setBillingAddress1('14, Nerazdelni str')
        ->setBillingZipCode('1407')
        ->setBillingCity('Montevideo')
        ->setBillingCountry('UY')


        // Risk Params
        ->setRiskUserId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>redpagos</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_reference>barney_rubble</consumer_reference>
    <national_id>8812128812</national_id>
    <birth_date>30-12-1992</birth_date>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Montevideo</city>
      <country>UY</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **redpagos**
transaction_id	required	string(255)	Unique transaction id defined by merchant

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
consumer_reference	required	string(20)	Consumer reference is a unique consumer identifier
national_id	required	string(20)	National ID of the consumer. See Document ID Parameter for more details.
birth_date	optional	string(20)	Birth date of the customer
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Country
UY

Successful Response

```
stdClass Object
(
    [transaction_type] => redpagos
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:13.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>redpagos</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:13Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => redpagos
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:13.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>redpagos</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:13Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Gift Cards

INTERSOLVE

Intersolve transactions are made using gift card provided by Intersolve

Using an intersolve transaction, the amount is immediately billed to the customer's gift card.

It can be reversed via a void transaction. Intersolve gift cards also support payout.

Use intersolve transactions if you are using gift cards provided by Intersolve.

This transaction type supports Tokenization.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\GiftCards\Intersolve');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardNumber('7000001163991388834')
        ->setCvv('944062')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.giftcards.IntersolveRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    IntersolveRequest request = new IntersolveRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardNumber("7000001163991388834");
    request.setCvv("944062");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>intersolve</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_number>7000001163991388834</card_number>
   <cvv>944062</cvv>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **intersolve**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_number	required	string(19..21)	Gift card number
cvv	required*	5 to 8 digits	Verification code of the gift card, requirement is based on terminal configuration
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted. Cannot be set together with `remember_card`
remember_card	optional	"true"	See Tokenize. Tokenizes cardholder parameters. Cannot be set together with `token`
consumer_id	optional	string(10)	See Consumers and Tokenization. Combine with `remember_card` to tokenize or with `token` to use token
billing_address	required*		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City

Parameter	Required	Format	Description
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => intersolve
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:13.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[intersolve]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:13Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>intersolve</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:13Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant

Parameter	Type	Description
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
consumer_id	string(10)	Consumer unique reference. See Consumers
token	string(36)	Plain-text token value. See Tokenization
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Error Response

```
stdClass Object
(
    [transaction_type] => intersolve
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => Transaction_id is invalid!
    [message] => Transaction_id is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:13.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[intersolve]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[Transaction_id is invalid!]>
    <message content=[Transaction_id is invalid!]>
    <timestamp content=[2021-02-04T15:26:13Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>intersolve</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>Transaction_id is invalid!</technical_message>
  <message>Transaction_id is invalid!</message>
  <timestamp>2021-02-04T15:26:13Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

FASHIONCHEQUE

Fashioncheque transactions are made using gift card provided by Fashioncheque

Using a fashioncheque transaction, the amount is immediately billed to the customer's gift card.

It can be reversed via a void transaction on the same day of the transaction. They can also be refunded.

Use fashioncheque transactions, if you are using gift cards provided by Fashioncheque.

> This transaction type supports Tokenization.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\GiftCards\Fashioncheque');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardNumber('6046425117120757123')
        ->setCvv('121839')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.giftcards.FashionchequeRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    FashionchequeRequest request = new FashionchequeRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardNumber("6046425117120757123");
    request.setCvv("121839");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>fashioncheque</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_number>6046425117120757123</card_number>
    <cvv>121839</cvv>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **fashioncheque**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details

Parameter	Required	Format	Description
currency	required	string(3)	Only USD and EUR
card_number	required	string(19..21)	Gift card number
cvv	required*	5 to 8 digits	Verification code of the gift card, requirement is based on terminal configuration
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted
billing_address	required*		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => fashioncheque
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:13.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[fashioncheque]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:13Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>fashioncheque</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:13Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Error Response

```
stdClass Object
(
    [transaction_type] => fashioncheque
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => Transaction_id is invalid!
    [message] => Transaction_id is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:13.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[fashioncheque]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[Transaction_id is invalid!]>
    <message content=[Transaction_id is invalid!]>
    <timestamp content=[2021-02-04T15:26:13Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>fashioncheque</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>Transaction_id is invalid!</technical_message>
  <message>Transaction_id is invalid!</message>
  <timestamp>2021-02-04T15:26:13Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

TCS

The container store **transactions are made using gift cards provided by TCS**.

The amount from a Container Store Transactions is immediately billed to the customer's gift card.

It can be reversed via a void transaction.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\GiftCards\Tcs');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardNumber('6046425117120757123')
        ->setCvv('121839')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.giftcards.TCSRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    TCSRequest request = new TCSRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardNumber("6046425117120757123");
    request.setCvv("121839");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>container_store</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <card_number>6046425117120757123</card_number>
   <cvv>121839</cvv>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **container_store**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Only USD and EUR
card_number	required	string(19..21)	Gift card number
cvv	required*	5 to 8 digits	Verification code of the gift card, requirement is based on terminal configuration
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted
billing_address	required*		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number

Parameter	Required	Format	Description
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => container_store
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:14.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[container_store]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:14Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>container_store</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:14Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details

Parameter	Type	Description
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Error Response

```
stdClass Object
(
    [transaction_type] => container_store
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => Transaction_id is invalid!
    [message] => Transaction_id is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:14.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[container_store]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[Transaction_id is invalid!]>
    <message content=[Transaction_id is invalid!]>
    <timestamp content=[2021-02-04T15:26:14Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>container_store</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>Transaction_id is invalid!</technical_message>
  <message>Transaction_id is invalid!</message>
  <timestamp>2021-02-04T15:26:14Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

SPLIT PAYMENTS

Split payments are performed on gift card transaction types when there isn't enough balance in the gift card. In order to use split payments you need to enable them on terminal. For more information please contact tech support.

Split payments follow this workflow:

- Split payment can be initiated only on gift card transaction.
- You can have maximum three payment series including the initial transaction.
- If the gift card does not have enough balance to perform the transaction, the whole available balance is taken from the gift card and new split payment is initiated.
- You can continue the split payment with another gift card
- You can finish the split payment with either gift card or credit card by submitting the 'unique id' of the initial transaction as 'reference id' in the request.
- Any failure during split payment causes rollback of all split payment series transactions.

> Credit card transaction can only be last in split payment series and any series transactions must be submitted with the actual leftover amount.

Example for initial split payment transaction:

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\GiftCards\Fashioncheque');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('5000')
        ->setCurrency('EUR')
        ->setCardNumber('6046425117120757123')
        ->setCvv('121839')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.giftcards.FashionchequeRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    FashionchequeRequest request = new FashionchequeRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(5000));
    request.setCurrency("EUR");
    request.setCardNumber("6046425117120757123");
    request.setCvv("121839");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>fashioncheque</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>5000</amount>
    <currency>EUR</currency>
    <card_number>6046425117120757123</card_number>
    <cvv>121839</cvv>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **fashioncheque**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details

Parameter	Required	Format	Description
currency	required	string(3)	Only USD and EUR
card_number	required	string(19..21)	Gift card number
cvv	required*	5 to 8 digits	Verification code of the gift card, requirement is based on terminal configuration
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted
billing_address	required*		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => fashioncheque
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 406bc1b340472db4dbbba4b749850234
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:14.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 2000
    [currency] => EUR
    [split_payment] => initiated
    [leftover_amount] => 3000
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[fashioncheque]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[406bc1b340472db4dbbba4b749850234]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:14Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[2000]>
    <currency content=[EUR]>
    <split_payment content=[initiated]>
    <leftover_amount content=[3000]>
    <sent_to_acquirer content=[true]>
]>
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>fashioncheque</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>406bc1b340472db4dbbba4b749850234</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:14Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>2000</amount>
  <currency>EUR</currency>
  <split_payment>initiated</split_payment>
  <leftover_amount>3000</leftover_amount>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
split_payment	string	Split payment status for this transaction. Should be 'initiated'.
leftover_amount	integer	Leftover amount of transaction in minor currency unit, see Currency Handling for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Error Response

```
stdClass Object
(
    [transaction_type] => fashioncheque
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => Transaction_id is invalid!
    [message] => Transaction_id is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:14.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 5000
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[fashioncheque]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[Transaction_id is invalid!]>
    <message content=[Transaction_id is invalid!]>
    <timestamp content=[2021-02-04T15:26:14Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[5000]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[false]>
]>
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>fashioncheque</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>Transaction_id is invalid!</technical_message>
  <message>Transaction_id is invalid!</message>
  <timestamp>2021-02-04T15:26:14Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>5000</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Example for continued split payment transaction:

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\GiftCards\Intersolve');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('406bc1b340472db4dbbba4b749850234')
        ->setAmount('3000')
        ->setCurrency('EUR')
        ->setCardNumber('7000001163991388834')
        ->setCvv('944062')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.giftcards.IntersolveRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    IntersolveRequest request = new IntersolveRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReferenceId("406bc1b340472db4dbbba4b749850234");
    request.setAmount(new BigDecimal(3000));
    request.setCurrency("EUR");
    request.setCardNumber("7000001163991388834");
    request.setCvv("944062");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>intersolve</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <reference_id>406bc1b340472db4dbbba4b749850234</reference_id>
   <amount>3000</amount>
   <currency>EUR</currency>
   <card_number>7000001163991388834</card_number>
   <cvv>944062</cvv>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **intersolve**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	The 'unique id' of the initial split payment transaction.
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_number	required	string(19..21)	Gift card number
cvv	required*	5 to 8 digits	Verification code of the gift card, requirement is based on terminal configuration
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted
billing_address	required*		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address

Parameter	Required	Format	Description
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => intersolve
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:14.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 2500
    [currency] => EUR
    [split_payment] => continued
    [leftover_amount] => 500
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[intersolve]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:14Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[2500]>
    <currency content=[EUR]>
    <split_payment content=[continued]>
    <leftover_amount content=[500]>
    <sent_to_acquirer content=[true]>
]>
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>intersolve</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:14Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>2500</amount>
  <currency>EUR</currency>
  <split_payment>continued</split_payment>
  <leftover_amount>500</leftover_amount>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
split_payment	string	Split payment status for this transaction. Should be 'continued'.
leftover_amount	integer	Leftover amount of transaction in minor currency unit, see Currency Handling for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Error Response

```
stdClass Object
(
    [transaction_type] => intersolve
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => Transaction_id is invalid!
    [message] => Transaction_id is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:14.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 3000
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[intersolve]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[Transaction_id is invalid!]>
    <message content=[Transaction_id is invalid!]>
    <timestamp content=[2021-02-04T15:26:14Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[3000]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[false]>
]>
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>intersolve</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>Transaction_id is invalid!</technical_message>
  <message>Transaction_id is invalid!</message>
  <timestamp>2021-02-04T15:26:14Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>3000</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Example for finalized split payment transaction:

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\GiftCards\Intersolve');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('406bc1b340472db4dbbba4b749850234')
        ->setAmount('500')
        ->setCurrency('EUR')
        ->setCardNumber('7000001163991388834')
        ->setCvv('944062')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.giftcards.IntersolveRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    IntersolveRequest request = new IntersolveRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReferenceId("406bc1b340472db4dbbba4b749850234");
    request.setAmount(new BigDecimal(500));
    request.setCurrency("EUR");
    request.setCardNumber("7000001163991388834");
    request.setCvv("944062");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>intersolve</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <reference_id>406bc1b340472db4dbbba4b749850234</reference_id>
   <amount>500</amount>
   <currency>EUR</currency>
   <card_number>7000001163991388834</card_number>
   <cvv>944062</cvv>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **intersolve**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	The 'unique id' of the initial split payment transaction.
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_number	required	string(19..21)	Gift card number
cvv	required*	5 to 8 digits	Verification code of the gift card, requirement is based on terminal configuration
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted
billing_address	required*		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address

Parameter	Required	Format	Description
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => intersolve
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:14.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 500
    [currency] => EUR
    [split_payment] => finalized
    [leftover_amount] => 0
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[intersolve]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:14Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[500]>
    <currency content=[EUR]>
    <split_payment content=[finalized]>
    <leftover_amount content=[0]>
    <sent_to_acquirer content=[true]>
]>
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>intersolve</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:14Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>500</amount>
  <currency>EUR</currency>
  <split_payment>finalized</split_payment>
  <leftover_amount>0</leftover_amount>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
split_payment	string	Split payment status for this transaction. Should be 'finalized'.
leftover_amount	integer	Leftover amount of transaction in minor currency unit, see Currency Handling for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Error Response

```
stdClass Object
(
    [transaction_type] => intersolve
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => Transaction_id is invalid!
    [message] => Transaction_id is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:14.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 500
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[intersolve]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[Transaction_id is invalid!]>
    <message content=[Transaction_id is invalid!]>
    <timestamp content=[2021-02-04T15:26:14Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[500]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[false]>
]>
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>intersolve</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>Transaction_id is invalid!</technical_message>
  <message>Transaction_id is invalid!</message>
  <timestamp>2021-02-04T15:26:14Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>500</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Split Payment can also be finalized using Sale or Sale3D

Example for finalized Sale split payment transaction:

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('406bc1b340472db4dbbba4b749850234')
        ->setAmount('500')
        ->setCurrency('EUR')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReferenceId("406bc1b340472db4dbbba4b749850234");
    request.setAmount(new BigDecimal(500));
    request.setCurrency("EUR");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "reference_id": "406bc1b340472db4dbbba4b749850234",
    "amount": "500",
    "currency": "EUR",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>sale</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <reference_id>406bc1b340472db4dbbba4b749850234</reference_id>
   <amount>500</amount>
   <currency>EUR</currency>
   <card_holder>Travis Pastrana</card_holder>
   <card_number>4200000000000000</card_number>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
   <cvv>834</cvv>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **sale**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
gaming	optional	"true"	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required*	string(32)	The 'unique id' of the initial split payment transaction
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_holder	required	string(255)	Full name of customer as printed on credit card (first name and last name at least)
card_number	required	13 to 16 digits	Complete cc number of customer
cvv	required*	3 to 4 digits	cvv of cc, requirement is based on terminal configuration
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
birth_date	required*	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada

Parameter	Required	Format	Description
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => sale
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [cvv_result_code] => M
    [authorization_code] => 345678
    [response_code] => 00
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:15.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 500
    [currency] => EUR
    [split_payment] => finalized
    [leftover_amount] => 0
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[sale]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <cvv_result_code content=[M]>
    <authorization_code content=[345678]>
    <response_code content=[00]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:15Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[500]>
    <currency content=[EUR]>
    <split_payment content=[finalized]>
    <leftover_amount content=[0]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "sale",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    cvv_result_code: "M",
    authorization_code: "345678",
    response_code: "00",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:15Z",
    descriptor: "Descriptor one",
    amount: "500",
    currency: "EUR",
    split_payment: "finalized",
    leftover_amount: "0",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <cvv_result_code>M</cvv_result_code>
  <authorization_code>345678</authorization_code>
  <response_code>00</response_code>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:15Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>500</amount>
  <currency>EUR</currency>
  <split_payment>finalized</split_payment>
  <leftover_amount>0</leftover_amount>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
split_payment	string	Split payment status for this transaction. Should be 'finalized'.
leftover_amount	integer	Leftover amount of transaction in minor currency unit, see Currency Handling for details

Parameter	Type	Description
sent_to_acquirer	string(255)	"true" or "false"
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Error Response

```
stdClass Object
(
    [response_code] => 57
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => billing_address[zip_code] is invalid!
    [message] => billing_address[zip_code] is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:15.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 500
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <response_code content=[57]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[billing_address[zip_code] is invalid!]>
    <message content=[billing_address[zip_code] is invalid!]>
    <timestamp content=[2021-02-04T15:26:15Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[500]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    response_code: "57",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "340",
    technical_message: "billing_address[zip_code] is invalid!",
    message: "billing_address[zip_code] is invalid!",
    timestamp: "2021-02-04T15:26:15Z",
    descriptor: "Descriptor one",
    amount: "500",
    currency: "EUR",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <response_code>57</response_code>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>billing_address[zip_code] is invalid!</technical_message>
  <message>billing_address[zip_code] is invalid!</message>
  <timestamp>2021-02-04T15:26:15Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>500</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Example for finalized Sale 3D split payment transaction:

Asynchronous 3 D Sv1 Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('406bc1b340472db4dbbba4b749850234')
        ->setAmount('500')
        ->setCurrency('EUR')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4711100000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // MPI Asynchronous
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success.html')
        ->setReturnFailureUrl('http://www.example.com/failure.html');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReferenceId("406bc1b340472db4dbbba4b749850234");
    request.setAmount(new BigDecimal(500));
    request.setCurrency("EUR");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4711100000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Mpi Asynchronous
    request.setNotificationUrl("https://www.example.com/notification");
    request.setReturnSuccessUrl("http://www.example.com/success.html");
    request.setReturnFailureUrl("http://www.example.com/failure.html");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "reference_id": "406bc1b340472db4dbbba4b749850234",
    "amount": "500",
    "currency": "EUR",
    "card_holder": "Travis Pastrana",
    "card_number": "4711100000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success.html",
    "return_failure_url": "http://www.example.com/failure.html"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <reference_id>406bc1b340472db4dbbba4b749850234</reference_id>
    <amount>500</amount>
    <currency>EUR</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4711100000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <payment_transaction>mpi_asynchronous</payment_transaction>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **sale3d**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
gaming	optional	"true"	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details

Parameter	Required	Format	Description
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	The 'unique id' of the initial split payment transaction
notification_url	required[1]	url	URL at merchant where gateway sends outcome of transaction.
return_success_url	required[1]	url	URL where customer is sent to after successful payment
return_failure_url	required[1]	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_holder	required	string(255)	Full name of customer as printed on credit card (first name and last name at least)
card_number	required	13 to 16 digits	Complete cc number of customer
cvv	required	3 to 4 digits	cvv of cc, requirement is based on terminal configuration
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
birth_date	required*	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
mpi_params	required[2]		
cavv	required[3]	string(255)	Verification Id of the authentication. Please note this can be the CAVV for Visa Card or UCAF to identify MasterCard.
eci	required[3]	string(255)	See Electronic Commerce Indicator as returned from the MPI for details
xid	required[3]	string(255)	Transaction ID generated by the 3D Secure service that uniquely identifies a 3D Secure check request
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.

`required* = conditionally required`

`1 - required if mpi_params is not present, the transaction will be handled asynchronously. Not required if configured on Terminal or Merchant level. Contact [tech-support@#{email_domain_name}](mailto:tech-support@#{email_domain_name}) for more details.`

2 - required if transaction should be handled synchronous.

3 - eci is always required if mpi_params is present. xid and cavv are not required for the 3D attempted only workflow, where the merchant does not have the xid/cavv, only the eci.

Successful Asynchronous Response

```
stdClass Object
(
    [transaction_type] => sale3d
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:15.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 500
    [currency] => EUR
    [split_payment] => finalized
    [leftover_amount] => 0
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[pending_async]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61]>
    <timestamp content=[2021-02-04T15:26:15Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[500]>
    <currency content=[EUR]>
    <split_payment content=[finalized]>
    <leftover_amount content=[0]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "sale3d",
    status: "pending_async",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61",
    timestamp: "2021-02-04T15:26:15Z",
    descriptor: "Descriptor one",
    amount: "500",
    currency: "EUR",
    split_payment: "finalized",
    leftover_amount: "0",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:15Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>500</amount>
  <currency>EUR</currency>
  <split_payment>finalized</split_payment>
  <leftover_amount>0</leftover_amount>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
split_payment	string	Split payment status for this transaction. Should be 'finalized'.
leftover_amount	integer	Leftover amount of transaction in minor currency unit, see Currency Handling for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Error Response

```
stdClass Object
(
    [transaction_type] => sale3d
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] => 57
    [code] => 340
    [technical_message] => expiration_year is invalid
    [message] => expiration_year is invalid
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:15.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 500
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[57]>
    <code content=[340]>
    <technical_message content=[expiration_year is invalid]>
    <message content=[expiration_year is invalid]>
    <timestamp content=[2021-02-04T15:26:15Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[500]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "sale3d",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "57",
    code: "340",
    technical_message: "expiration_year is invalid",
    message: "expiration_year is invalid",
    timestamp: "2021-02-04T15:26:15Z",
    descriptor: "Descriptor one",
    amount: "500",
    currency: "EUR",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <response_code>57</response_code>
  <code>340</code>
  <technical_message>expiration_year is invalid</technical_message>
  <message>expiration_year is invalid</message>
  <timestamp>2021-02-04T15:26:15Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>500</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Voiding of split payments:

- Voiding of any transaction in unfinished split payment (while still pending async) will cause rollback of all other transactions in split payment series. The current transaction will appear as voided while the other transaction will become declined.
- Voiding any transaction after the split payment has been completed will cause voiding only of the single transaction. In order to revert such split payment you need to manually void all transactions in it.
- The above points are valid also for refunding the transactions if the gift card gateway supports refund.

Split Payment Timeouts:

- All unfinished split payments will be automatically timed out after a period of time and all transactions in them will be rollbacked.
- If the split payment is finished with async 3D credit card transaction the split payment will be timed out according to the mpi timeout of the final transaction.

Invoice Payment Methods

Alternative payments refer to payment methods that are used as an alternative to credit card payments.

Each alternative payment method has its own unique application, settlement process and currency support.

INVOICE

> Klarna is a Swedish e-commerce company that provides payment services for online stores.

With Invoice transactions, you can confirm that an order is successful.

After settling the transaction (e.g. shipping the goods), you should use invoice capture transaction type to capture the amount.

Invoice transaction will automatically be cancelled after a certain time frame, most likely two weeks.

For a typical e-commerce application it is recommended to authorize the amount on incoming orders and capture it when shipping the goods.

If you choose not to serve the customer, consider to void the invoice to cancel the initial transaction.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\Invoice\Authorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('klarna')
        ->setPaymentMethodCategory('pay_over_time')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnCancelUrl('http://www.example.com/cancel')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('60')
        ->setCurrency('EUR')
        ->setCustomerPhone('1987987987987')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerGender('male')
        ->setCustomerBirthdate('1990-03-20')
        ->setCustomerReferenceNumber('123')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Berlin')
        ->setBillingState('Berlin')
        ->setBillingCountry('DE')


        // Shipping Address
        ->setShippingFirstName('Travis')
        ->setShippingLastName('Pastrana')
        ->setShippingAddress1('Muster Str. 12')
        ->setShippingZipCode('10178')
        ->setShippingCity('Berlin')
        ->setShippingState('Berlin')
        ->setShippingCountry('DE');

    // Transaction Items
    $items = new \Genesis\API\Request\Financial\Alternatives\Transaction\Items('EUR');
    $item  = new \Genesis\API\Request\Financial\Alternatives\Transaction\Item();
    $item
        ->setItemType('physical')
        ->setReference('19-402-USA')
        ->setName('BatteryPowerPack')
        ->setQuantity('1')
        ->setUnitPrice('60')
        ->setTaxRate('0')
        ->setTotalAmount('60')
        ->setTotalDiscountAmount('0')
        ->setTotalTaxAmount('0')
        ->setImageUrl('https://example.com/image_url')
        ->setProductUrl('https://example.com/product_url')
        ->setQuantityUnit('pcs')
        ->addMerchantMarketplaceSellerInfo('Electronic gadgets')
    $items->addItem($item);

    $request->setItems($items);

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>invoice</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <payment_type>klarna</payment_type>
  <payment_method_category>pay_over_time</payment_method_category>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <return_cancel_url>http://www.example.com/cancel</return_cancel_url>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>60</amount>
  <currency>EUR</currency>
  <customer_phone>1987987987987</customer_phone>
  <customer_email>travis@example.com</customer_email>
  <customer_gender>male</customer_gender>
  <customer_birthdate>1990-03-20</customer_birthdate>
  <customer_reference_number>123</customer_reference_number>
  <order_tax_amount>0</order_tax_amount>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Berlin</city>
    <state>Berlin</state>
    <country>DE</country>
  </billing_address>
  <shipping_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Berlin</city>
    <state>Berlin</state>
    <country>DE</country>
  </shipping_address>
  <items>
    <item>
      <item_type>physical</item_type>
      <reference>19-402-USA</reference>
      <name>BatteryPowerPack</name>
      <quantity>1</quantity>
      <unit_price>60</unit_price>
      <tax_rate>0</tax_rate>
      <total_amount>60</total_amount>
      <total_discount_amount>0</total_discount_amount>
      <total_tax_amount>0</total_tax_amount>
      <image_url>https://example.com/image_url</image_url>
      <product_url>https://example.com/product_url</product_url>
      <quantity_unit>pcs</quantity_unit>
      <merchant_data>
        <marketplace_seller_info>Electronic gadgets</marketplace_seller_info>
      </merchant_data>
    </item>
  </items>
</payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **invoice**
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_type	required	string	Payment provider type: **klarna** / **secure_invoice**
payment_method_category	required	string(255)	Payment method category: either **pay_over_time** or **pay_later**
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name

Parameter	Required	Format	Description
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
customer_gender	optional		Customer gender
customer_birthdate	required*	yyyy-mm-dd	Customer date of birth, required for Secure Invoice
customer_reference_number	required*	string(255)	Customer reference number, required for Secure Invoice
order_tax_amount	required		Non-negative, minor units. The total tax amount of the order
items	required		List with items
item_type	required	string(255)	Order line type. Possible values: Supported item types
quantity	required	integer	Non-negative. The item quantity
unit_price	required	integer	Minor units. Includes tax, excludes discount(max value: 100000000)
total_amount	required	integer	Includes tax and discount. Must match (quantity unit price) - total discount amount divided by quantity (max value: 100000000)
reference	optional	string(255)	Article number, SKU or similar
name	optional	string(255)	Descriptive item name
tax_rate	optional	integer	Non-negative. In percent, two implicit decimals. I.e 2500 = 25.00 percent
total_discount_amount	optional	integer	Non-negative minor units. Includes tax
total_tax_amount	optional	integer	Must be within 1 of total amount - total_amount * 10000 / (10000 + tax rate). Negative when type is discount
image_url	optional	url	URL to an image that can be later embedded in communications between Klarna and the customer. (max 1024 characters)
product_url	optional	url	URL to an image that can be later embedded in communications between Klarna and the customer. (max 1024 characters)
quantity_unit	optional	string(8)	Unit used to describe the quantity, e.g. kg, pcs... If defined has to be 1-8 characters
product_identifiers	optional		List with product identifiers
brand	optional	string(255)	The product's brand name as generally recognized by consumers. If no brand is available for a product, do not supply any value
category_path	optional	string(255)	The product's category path as used in the merchant's webshop. Include the full and most detailed category and separate the segments with ' > '
global_trade_item_number	optional	string(255)	The product's Global Trade Item Number (GTIN). Common types of GTIN are EAN, ISBN or UPC. Exclude dashes and spaces, where possible
manufacturer_part_number	optional	string(255)	The product's Manufacturer Part Number (MPN), which - together with the brand - uniquely identifies a product. Only submit MPNs assigned by a manufacturer and use the most specific MPN possible
merchant_data	optional		List with merchant data
marketplace_seller_info	optional	string(255)	Information for merchant marketplace

`required* = conditionally required`

Supported countries:

Country	Country code
Austria	AT
Denmark	DK
Finland	FI
Germany	DE
Netherlands	NL
Norway	NO
Sweden	SE

Supported item types:

Item Types
physical
discount
shipping fee
sales tax
digital
gift card
store credit
surcharge

Successful Response

```
stdClass Object
(
    [transaction_type] => invoice
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:15.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 60
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>invoice</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:15Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>60</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => invoice
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:15.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 60
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>invoice</transaction_type>
  <status>error</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:15Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>60</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

Parameter	Type	Description
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
sent_to_acquirer	string(255)	"true" or "false"

INVOICE CAPTURE

Invoice capture settles a Invoice transaction.

Do this when you are shipping goods, for example. A Invoice capture can only be used after a Invoice on the same transaction.

Therefore, the `reference_id` of the Invoice transaction is mandatory.

> You can also use invoice capture for partial amount of the initial invoice authorize amount but invoice capture amount should be the same as the sum of items total amount. However, you cannot capture a higher amount than initially authorized.

Transaction workflow:

1. The merchant sends invoice transaction to the gateway.
2. The gateway replies to it. One of returned values is the unique id of the transaction.
3. The merchant sends invoice capture transaction. Its reference id is unique id of invoice response.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Alternatives\Invoice\Capture');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setPaymentType('klarna')
        ->setIban('DE09100100101234567891')
        ->setAccountHolder('Ivan Ivanov')
        ->setBankTransferRemittanceSlip('123123123')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('43672')
        ->setAmount('60')
        ->setCurrency('EUR');

    // Transaction Items
    $items = new \Genesis\API\Request\Financial\Alternatives\Transaction\Items('EUR');
    $item  = new \Genesis\API\Request\Financial\Alternatives\Transaction\Item();
    $item
        ->setItemType('physical')
        ->setReference('19-402-USA')
        ->setName('BatteryPowerPack')
        ->setQuantity('1')
        ->setUnitPrice('60')
        ->setTaxRate('0')
        ->setTotalAmount('60')
        ->setTotalDiscountAmount('0')
        ->setTotalTaxAmount('0')
        ->setImageUrl('https://example.com/image_url')
        ->setProductUrl('https://example.com/product_url')
        ->setQuantityUnit('pcs')
        ->addMerchantMarketplaceSellerInfo('Electronic gadgets')
    $items->addItem($item);

    $request->setItems($items);

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>invoice_capture</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <payment_type>klarna</payment_type>
  <iban>DE09100100101234567891</iban>
  <account_holder>Ivan Ivanov</account_holder>
  <bank_transfer_remittance_slip>123123123</bank_transfer_remittance_slip>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <reference_id>43672</reference_id>
  <amount>60</amount>
  <currency>EUR</currency>
  <items>
    <item>
      <item_type>physical</item_type>
      <reference>19-402-USA</reference>
      <name>BatteryPowerPack</name>
      <quantity>1</quantity>
      <unit_price>60</unit_price>
      <tax_rate>0</tax_rate>
      <total_amount>60</total_amount>
      <total_discount_amount>0</total_discount_amount>
      <total_tax_amount>0</total_tax_amount>
      <image_url>https://example.com/image_url</image_url>
      <product_url>https://example.com/product_url</product_url>
      <quantity_unit>pcs</quantity_unit>
      <merchant_data>
        <marketplace_seller_info>Electronic gadgets</marketplace_seller_info>
      </merchant_data>
    </item>
  </items>
</payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **invoice_capture**
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_type	required	string	Payment provider type: **klarna** / **secure_invoice**
account_holder	required*	string(255)	Account Holder, required for Secure Invoice in case of Direct Debit payment (payment_method_category: pay_over_time)
iban	required*	string(255)	IBAN, required for Secure Invoice in case of Direct Debit payment (payment_method_category: **pay_over_time**)
bank_transfer_remittance_slip	required*	string(255)	Bank Transfer Remittance Slip, required for Secure Invoice. Less then 16 symbols.
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	Unique id returned by corresponding transaction
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
items	required		List with items
item_type	required	string(255)	Order line type. Possible values: Supported item types
quantity	required	integer	Non-negative. The item quantity
unit_price	required	integer	Minor units. Includes tax, excludes discount(max value: 100000000)
total_amount	required	integer	Includes tax and discount. Must match (quantity unit price) - total discount amount divided by quantity (max value: 100000000)
reference	optional	string(255)	Article number, SKU or similar
name	optional	string(255)	Descriptive item name
tax_rate	optional	integer	Non-negative. In percent, two implicit decimals. I.e 2500 = 25.00 percent
total_discount_amount	optional	integer	Non-negative minor units. Includes tax
total_tax_amount	optional	integer	Must be within 1 of total amount - total_amount * 10000 / (10000 + tax rate). Negative when type is discount
image_url	optional	url	URL to an image that can be later embedded in communications between Klarna and the customer. (max 1024 characters)
product_url	optional	url	URL to an image that can be later embedded in communications between Klarna and the customer. (max 1024 characters)
quantity_unit	optional	string(8)	Unit used to describe the quantity, e.g. kg, pcs... If defined has to be 1-8 characters

Parameter	Required	Format	Description
product_identifiers	optional		List with product identifiers
brand	optional	string(255)	The product's brand name as generally recognized by consumers. If no brand is available for a product, do not supply any value
category_path	optional	string(255)	The product's category path as used in the merchant's webshop. Include the full and most detailed category and separate the segments with ' > '
global_trade_item_number	optional	string(255)	The product's Global Trade Item Number (GTIN). Common types of GTIN are EAN, ISBN or UPC. Exclude dashes and spaces, where possible
manufacturer_part_number	optional	string(255)	The product's Manufacturer Part Number (MPN), which - together with the brand - uniquely identifies a product. Only submit MPNs assigned by a manufacturer and use the most specific MPN possible
merchant_data	optional		List with merchant data
marketplace_seller_info	optional	string(255)	Information for merchant marketplace

`required* = conditionally required`

Supported countries:

Country	Country code
Austria	AT
Denmark	DK
Finland	FI
Germany	DE
Netherlands	NL
Norway	NO
Sweden	SE

Supported item types:

Item Types
physical
discount
shipping_fee
sales_tax
digital
gift_card
store_credit
surcharge

Successful Response

```
stdClass Object
(
    [transaction_type] => invoice_capture
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:16.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 60
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>invoice_capture</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:16Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>60</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => invoice_capture
    [status] => error
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:16.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 60
    [currency] => EUR
    [sent_to_acquirer] => false
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>invoice_capture</transaction_type>
  <status>error</status>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:16Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>60</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
sent_to_acquirer	string(255)	"true" or "false"

Crypto

Alternative payment methods supporting digital cryptocurrencies.

BITPAY SALE

BitPay is a cryptocurrency payments provider supporting blockchain payments with Bitcoin (BTC) and BitcoinCash (BCH).

BitPay Sale is an asynchronous transaction type.

When this payment method is selected at checkout, the customer will be redirected to the BitPay system window including all the data for the payment: Bitcoin/BitcoinCash account, amount to be paid in cryptocurrency and the Fiat equivalent.

If the customer possesses a BitPay wallet or another BitPay compatible crypto wallet, the payment can be done from that window with one click, otherwise a QR CODE containing all the payment data can be scanned and used in any crypto wallet.

Then the customer has 15 minutes to fulfill the generated invoice.

If that timeframe is not met, the invoice will expire and the Merchant will be notified.

If the invoice is fulfilled in the timeframe, it needs to obtain 6 blockchain confirmations (1 hour) before it's safe for the payment to be considered as completed.

At that point, the Merchant will be notified for the approved payment.

After the 6th confirmation, when the transaction is completed, the Merchant can process a refund if it's needed.

> Each transaction has amount limits of minimum 1 USD and maximum of 950 000 USD or its equivalent in EUR

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Crypto\BitPay\Sale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReturnUrl('https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f')
        ->setAmount('3000')
        ->setCurrency('EUR')
        ->setCustomerEmail('travis@example.com')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Berlin')
        ->setBillingCountry('DE');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>bitpay_sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <return_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/a55ab44d242f</return_url>
    <amount>3000</amount>
    <currency>EUR</currency>
    <customer_email>travis@example.com</customer_email>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Berlin</city>
      <country>DE</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **bitpay_sale**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	optional	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_url	required	url	URL where consumer is sent to after payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required	e-mail address	Must contain valid e-mail of customer
billing_address	required*		See Required vs Optional API params for details

Parameter	Required	Format	Description
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => bitpay_sale
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:16.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 3000
    [currency] => EUR
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bitpay_sale</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/649e1ff35c61</redirect_url>
  <timestamp>2021-02-04T15:26:16Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>3000</amount>
  <currency>EUR</currency>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => bitpay_sale
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [technical_message] => Something went wrong, please contact support!
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:16.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 3000
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bitpay_sale</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <technical_message>Something went wrong, please contact support!</technical_message>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:16Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>3000</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).

Parameter	Type	Description
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Payouts

BANK PAY-OUT

Bank Pay-out option allows merchants to transfer funds directly to their consumers' bank account.

To process a bank pay-out via Trustly system, you need to have your customer's unique **Account_ID**. It is returned to your notification url during initial Trustly sale transaction. Alternatively, you may generate new customer's **Account_ID** via one the following steps: Trustly-register-account or Trustly-select-account

Once you've got your consumer's **Account_ID**, you may proceed to the Bank-Pay-out call.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\OnlineBankingPayments\OnlineBanking\Payout');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('50000')
        ->setCurrency('INR')
        ->setCustomerPhone('+1987987987987')
        ->setCustomerEmail('travis@example.com')
        ->setBankName('Netbanking')
        ->setBankBranch('HDFC0000001')
        ->setBankAccountNumber('1234123412341234')
        ->setBankAccountName('Anurak Nghuen')
        ->setIdCardNumber('123789456')
        ->setPayerBankPhoneNumber('01234567891')
        ->setBankAccountType('C')
        ->setDocumentType('PASS')


        // Billing Address
        ->setBillingFirstName('Anurak')
        ->setBillingLastName('Nghuen')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('New Delhi')
        ->setBillingState('New Delhi')
        ->setBillingCountry('IN');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bank_payout</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <amount>50000</amount>
  <currency>INR</currency>
  <customer_phone>+1987987987987</customer_phone>
  <customer_email>travis@example.com</customer_email>
  <bank_name>Netbanking</bank_name>
  <bank_branch>HDFC0000001</bank_branch>
  <bank_account_number>1234123412341234</bank_account_number>
  <bank_account_name>Anurak Nghuen</bank_account_name>
  <id_card_number>123789456</id_card_number>
  <payer_bank_phone_number>01234567891</payer_bank_phone_number>
  <bank_account_type>C</bank_account_type>
  <document_type>PASS</document_type>
  <billing_address>
    <first_name>Anurak</first_name>
    <last_name>Nghuen</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>New Delhi</city>
    <state>New Delhi</state>
    <country>IN</country>
  </billing_address>
</payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **bank_payout**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
notification_url	required	url	URL at merchant where gateway sends outcome of transaction.
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
bank_name	required*	bank name	Must contain Bank Names
bank_branch	required*	bank branch	Name of the Bank branch
bank_account_name	required*	bank account name	Bank account name is required, for CNY currency and should be in Simplified Chinese. For other currency, must be in English Language.
bank_account_number	required*	bank account number	Bank account number of the customer.
bank_province	required*	bank province	Name of the province that the bank is located.
id_card_number	required*	string(30)	ID card number
payer_bank_phone_number	required*	string(11)	Payer bank phone number
bank_account_type	required*	string(1)	The type of account. C: for Checking accounts S: for Savings accounts M: for Maestra accounts(Only Peru)
document_type	required*	string(10)	ID card/document type

Parameter	Required	Format	Description
account_id	required*	string(255)	Unique account identifier in Trustly's system. You will receive this after Select Account call and after Trustly Sale on the notification URL.
user_id	required*	string(255)	Unique user identifier defined by merchant in their own system. ID, username, hash or anything uniquely identifying the consumer requesting the deposit. Must be static per each consumer for any type of transaction where this consumer is involved (trustly_sale, bank pay_out, register_account, select account).
birth_date	required*	dd-mm-yyyy	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
billing_address	required		See Required vs Optional API params for details
first_name	required	string(255)	Customer first name
last_name	required	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported currencies

Currency name	Currency code
Argentine peso	ARS
Brazilian real	BRL
Chilean peso	CLP
China yen	CNY
Colombian peso	COP
Indonesian rupiah	IDR
Indian rupee	INR
Malaysian ringgit	MYR
Mexican peso	MXN
Peruvian sol	PEN
Thai baht	THB
Uruguayan peso	UYU

BANK NAMES

Bank Names may vary based on the specific setup.

For CNY currency:

Bank Name

Bank Name

Bank Name
Krung Thai Bank
Siam Commercial Bank
UOBT

For IDR currency:

Bank Name
Bank Central Asia
Bank Rakyat Indonesia
Bank Negara Indonesia
BTN Bank
CIMB Clicks Indonesia
Danamon Bank
Mandiri Bank
Permata Bank

For INR currency:

Bank Name
ABHYUDAYA COOP BANK
THE ROYAL BANK OF SCOTLAND
ABU DHABI COMMERCIAL BANK
THE AKOLA DISTRICT CENTRAL COOPERATIVE BANK
AIRTEL PAYMENTS BANK LIMITED
AKOLA JANATA COMMERCIAL COOPERATIVE BANK
ALLAHABAD BANK
THE AHMEDABAD MERC COOP BANK
ANDHRA BANK
AUSTRALIA & NEW ZEALAND BANK
THE ANDHRA PRADESH STATE COOP BANK
ANDHRA PRAGATI GRAMEEN BANK
THE A.P. MAHESH CO-OP URBAN BANK
APNA SAHAKARI BANK LTD
ALMORA URBAN CO-OPERATIVE BANK LTD.
BASSEIN CATHOLIC CO-OP BANK
BANK OF BARODA
BARCLAYS BANK
BANK OF BAHREIN & KUWAIT
THE BHARAT COOPERATIVE BANK
BANK OF CEYLON
BANDHAN BANK LIMITED
DENA BANK
BANK OF INDIA
BHARATIYA MAHILA BANK LIMITED
B N PARIBAS BANK
BANK OF AMERICA

Bank Name
BANK OF TOKYO-MITSUBISHI
CENTRAL BANK OF INDIA
CITIZEN CREDIT COOP BANK
JP MORGAN CHASE BANK
CITI BANK
CITY UNION BANK
CAPITAL LOCAL AREA BANK LTD.
CANARA BANK
CORPORATION BANK
THE COSMOS CO-OP. BANK
CREDIT SUISSE AG?
CREDIT AGRICOLE CORP N INVSMNT BK
CHHATRAPATI RAJARSHISHAHU COOP BANK
CATHOLIC SYRIAN BANK
COMMONWEALTH BK OF AUSTRALIA
CHINATRUST COMMERCIAL BANK
DEVELOPMENT BANK OF SINGAPORE
DEVELOPMENT CREDIT BANK
DEOGIRI NAGARI SAHAKARI BANK LTD. AURANGABAD
DEUTSCHE BANK
DICGC
THE DELHI STATE COOPERATIVE BANK LIMITED
DHANALAXMI BANK
DOMBIVLI NAGARI SAHAKARI BANK LTD
DOHA BANK QSC
EXPORT IMPORT BANK OF INDIA
EQUITAS SMALL FINANCE BANK LIMITED
THE FEDERAL BANK
FIRSTRAND BANK
THE GREATER BOMBAY CO-OP. BANK LTD
THE GADCHIROLI DISTRICT CENTRAL COOPERATIVE BANK LIMITED
GURGAON GRAMIN BANK LTD.
THE GUJARAT STATE CO-OPERATIVE BANK
THE HASTI COOP BANK LTD
HDFC BANK LTD.
HIMACHAL PRADESH STATE COOPERATIVE BANK LTD
HONG KONG & SHANGHAI BANK
Woori
PT BANK MAYBANK INDONESIA TBK
IDBI BANK
INDUSTRIAL BANK OF KOREA
INDUSTRIAL AND COMMERCIAL BANK OF CHINA LIMITED
ICICI BANK LTD.

Bank Name
IDFC BANK LIMITED
INDIAN BANK
IDUKKI DISTRICT CO OPERATIVE BANK LTD
INDUS-IND BANK
INDIAN OVERSEAS BANK
THE JAMMU & KASHMIR BANK
JANSEVA SHAHKARI BANK LTD. PUNE
JANASEVA SAHAKARI BANK BORIVLI LIMITED
JALGAON JANATA SAHAKARI
THE JALGAON PEOPELS COOPERATIVE BANK LIMITED
JANKALYAN SHAKARI BANK
JANATA SAHAKARI BANK LTD (PUNE)
THE KANGRA CENTRAL COOPERATIVE BANK
KALLAPPANNA AWADE ICH JANATA S
THE KANGRA COOPERATIVE BANK LTD
KARNATAKA BANK
KAPOLE BANK
THE KALUPUR COMM COOP BANK
THE KALYAN JANATA SAHAKARI BANK
KOTAK MAHINDRA BANK
KERALA GRAMIN BANK
THE KURMANCHAL NAGAR SAHAKARI BANK LIMITED
THE KARNATAKA STATE COOP APEX BANK
KEB Hana Bank
THE KARAD URBAN COOP BANK LTD
KARUR VYSYA BANK
KARNATAKA GRAMIN VIKAS BANK
THE LAKSHMI VILAS BANK
BANK OF MAHARASHTRA
Maharashtra Gramin Bank
MAHANAGAR COOP BANK
MUMBAI DISTRICT CENTRAL CO-OP BANK
MIZUHO CORPORATE BANK LTD
Maharashtra State Cooperative Bank
MASHREQ BANK
THE MEHSANA URBAN COOPERATIVE BANK
THE MUNICIPAL CO OPERATIVE BANK LTD
NATIONAL AUSTRALIA BANK LIMITED
NATIONAL BANK OF ABU DHABI PJSC
NAGPUR NAGRIK (NNSB LTD*)
NEW INDIA CO-OPERATIVE BANK
NKGSB BANK
THE NASIK MERCHANTS CO-OP BANK LTD.

Bank Name
NORTH MALBAR GRAMIN BANK
NUTAN NAGARIK SAHAKARI BANK
THE BANK OF NOVA SCOTIA
THE NAINITAL BANK LTD
NAGAR URBAN CO OPERATIVE BANK
OMAN INTERNATIONAL BANK
ORIENTAL BANK OF COMMERCE
PARSIK JANATA SAHAKARI BANK
PRAGATHI KRISHNA GRAMIN BANK
PUNJAB AND MAHARASHTRA CO-OP BANK
PRIME CO OPERATIVE BANK LTD
PRATHAMA BANK
PUNJAB AND SIND BANK
THE PANDHARPUR URBAN CO OP. BANK LTD. PANDHARPUR
PUNJAB NATIONAL BANK
RABOBANK INTERNATIONAL (CCRB)
THE RATNAKAR BANK
RESERVE BANK OF INDIA
RAJKOT NAGARIK SAHAKARI BANK LTD
RAJGURUNAGAR SAHAKARI BANK LIMITED
THE RAJASTHAN STATE CO-OP BANK
SBERBANK
SAHEBRAO DESHMUKH COOPERATIVE BANK LIMITED
STATE BANK OF BIKANER AND JAIPUR
STATE BANK OF HYDERABAD
STATE BANK OF INDIA
STATE BANK OF MYSORE
SAMARTH SAHAKARI BANK LTD
STATE BANK OF TRAVANCORE
STANDARD CHARTERED BANK
THE SURAT DISTRICT CO-OP BAN
SHINHAN BANK
SHIKSHAK SAHAKARI BANK LIMITED
SOUTH INDIAN BANK
SOLAPUR JANATA SAHAKARI BANK LIMITED
SUMITOMO MITSUI BANKING CORPORATION
SHIVALIK MERCANTILE CO OPERATIVE BANK LTD
SOCIETE GENERALE
THE SURAT PEOPLE?S CO-OP BANK
THE SARASWAT CO-OPERATIVE BANK
STATE BANK OF PATIALA
STATE BANK OF MAURITIUS
SURAT NATIONAL COOPERATIVE BANK LIMITED

Bank Name
THE SUTEX COOPERATIVE BANK
THE SEVA VIKAS COOPERATIVE BANK LIMITED
THE SHAMRAO VITHAL COOP BANK
SYNDICATE BANK
THANE BHARAT SAHAKARI BANK LTD
THE THANE DISTRICT CENTRAL COOPERATIVE BANK LIMITED
TUMKUR GRAIN MERCHANTS CO-OP BANK
THE THANE JANATA SAHAKARI BANK
TAMILNADU MERC. BANK
THE TAMILDADU STATE APEX COOP BANK
UNION BANK OF INDIA
UBS AG
UCO BANK
UNITED OVERSEAS BANK LIMITED
UNITED BANK OF INDIA
AXIS BANK
THE VARACHHA CO-OP. BANK LTD.
VIJAYA BANK
THE VISHWESHWAR SAHAKARI BANK LTD
VASAI VIKAS SAHAKARI BANK
ING VYSYA BANK
THE WEST BENGAL STATE CO-OP BANK
WESTPAC BANKING CORPORATION
YES BANK
THE ZOROASTRIAN COOPERATIVE BANK LIMITED
ZILA SAHAKRI BANK LIMITED GHAZIABAD

For ARS currency:

Bank Name
A.B.N Amro Bank
Banco de Galicia Y Buenos Aires
Lloyds Tsb Bank
Banco de La Nacion Argentina
Banco de La Provincia de Buenos A
Bankboston, National Associa
Citibank
BBVA Banco Frances
The Bank Of Tokyo - Mitsubishi
Banco de La Provincia de Cordoba
Banco Societe Generale
Banco de La Ciudad de Buenos Aires
Banco Patagonia Sudameris
Banco Hipotecario
Banco de San Juan

Bank Name
Banco Do Brasil
Banco Del Tucuman
Banco Municipal de Ros
Banco Rio de La Plata
Banco Regional de Cuyo
Banco Del Chubut
Banco de Santa Cruz
Banco de La Pampa Sociedad de Economia M
Banco de Corrientes
Banco Provincia Del Neuquen
Banco Empresario de Tucuman Coop. L
Banco B. I. Creditanstalt
HSBC Bank Argentina
J P Morgan Chase Bank Sucursal Buenos Aires
Banco Credicoop Coop. L
Banco de Valores
Banco Roela
Banco Mariva
Banco Itau Buen Ayre
Bank Of America, National Associa
Banca Nazionale Del Lavoro
Bnp Paribas
Banco Provincia de Tierra Del Fuego
Banco de La Republica Oriental Del Uruguay
Banco Saenz
Banco Meridian
Banco Macro Bansud
Banco Mercurio
Ing Bank
American Express Bank Ltd
Banco Banex
Banco Comafi
Banco de Inversion Y Comercio Exterior
Banco Piano
Banco Finansur
Banco Julio
Banco Privado de Inversiones
Nuevo Banco de La Rioja
Banco Del Sol
Nuevo Banco Del Chaco
M. B. A. Banco de Inversiones
Banco de Formosa
Banco CMF

Bank Name
Banco de Santiago Del Estero
Nuevo Banco Industrial de Azul
Deutsche Bank
Nuevo Banco de Santa Fe
Banco Cetelem Argentina
Banco de Servicios Financieros
Banco Cofidis
Banco Bradesco Argentina
Banco de Servicios Y Transacciones
Rci Ba
Bacs Banco de Credito Y Securitizacion
Nuevo Banco de Entre Rios
Nuevo Banco Suquia
Nuevo Banco Bisel
Banco Columbia

For BRL currency:

Bank Name
BANCO DO BRASIL S.A.
BANCO DA AMAZONIA S.A.
BANCO DO NORDESTE DO BRASIL S.A.
BANESTES S.A. BANCO DO ESTADO DO ESPIRITO SANTO
BANCO SANTANDER BRASIL S.A.
BANCO DO ESTADO DO PARA S.A. - BANPARA
BANCO DO ESTADO DO RIO GRANDE DO SUL S.A. - BANRISUL
BANCO DO ESTADO DE SERGIPE S.A. - BANESE
BANCO DE BRASILIA S.A. - BRB
CAIXA ECONOMICA FEDERAL - CEF
BANCO BONSUCESSO S.A.
BANCO BRADESCO S.A.
BANCO ABC BRASIL S.A.
ITAU UNIBANCO S.A.
BANCO MERCANTIL DO BRASIL S.A.
HSBC BANK BRASIL S.A. - BANCO MULTIPLO
BANCO SAFRA S.A.
CITIBANK N.A.
BANCO DAYCOVAL S.A.
BANCO MODAL S.A.
BANCO COOPERATIVO SICREDI S.A.
BANCO COOPERATIVO DO BRASIL S/A - BANCOOB

For CLP currency:

Bank Name
Banco de Chile

Bank Name
Banco Internacional
Banco del Estado de Chile
Scotiabank Chile
Banco Crédito e Inversiones
Banco Bice
HSBC Bank
Banco Santander- Santiago
Itau Corpbanca
ABN Amro Bank Chile
Banco Security
Banco Falabella
Deutsche Bank
Banco Ripley
Rabobank Chile
Banco Consorcio
Banco Penta
BBVA Chile
Banco del Desarrollo

For COP currency:

Bank Name
BANCO DE BOGOTA
BANCO POPULAR
CORPBANCA
BANCOLOMBIA
CITIBANK
HSBC
BANCO SUDAMERIS
BBVA
HELM BANK S.A
BANCO COLPATRIA
BANCO DE OCCIDENTE
BANCO CAJA SOCIAL BCSC
BANCO AGRARIO
BANCO DAVIVIENDA
BANCO AV VILLAS
BANCO PROCREDIT
BANCO PICHINCHA
BANCOOMEVA
BANCO FALABELLA S.A
COOPCENTRAL S.A
COOPERATIVA FINANCIERA DE ANTIOQUIA
COTRAFA COOPERATIVA FINANCIERA
CONFIAR

Bank Name
FINANCIERA JURISCOOP

For MXN currency:

Bank Name
BANAMEX
BANCOMEXT
BANOBRAS
BBVA BANCOMER
SANTANDER
BANJERCITO
HSBC
BAJIO
IXE
INBURSA
INTERACCIONES
MIFEL
SCOTIABANK
BANREGIO
INVEX
BANSI
AFIRME
BANORTE
THE ROYAL BANK
AMERICAN EXPRESS
BAMSA
TOKYO
JP MORGAN
BMONEX
VE POR MAS
ING
DEUTSCHE
CREDIT SUISSE
AZTECA
AUTOFIN
BARCLAYS
COMPARTAMOS
BANCO FAMSA
BMULTIVA
ACTINVER
WALMART
NAFIN
INTERBANCO
BANCOPPEL
ABC CAPITAL

Bank Name
UBS BANK
CONSUBANCO
VOLKSWAGEN
CIBANCO
BBASE
BANSEFI
HIPOTECARIA FEDERAL
MONEXCB
GBM
MASARI
VALUE
ESTRUCTURADORES
TIBER
VECTOR
B&B
ACCIVAL
MERRILL LYNCH
FINAMEX
VALMEX
UNICA
MAPFRE
PROFUTURO
CB ACTINVER
OACTIN
SKANDIA
CBDEUTSCHE
ZURICH
ZURICHVI
SU CASITA
CB INTERCAM
CI BOLSA
BULLTICK CB
STERLING
FINCOMUN
HDI SEGUROS
ORDER
AKALA
CB JPMORGAN
REFORMA
STP
TELECOMM
EVERCORE
SKANDIA

Bank Name
SEGMTY
ASEA
KUSPIT
SOFIEXPRESS
UNAGRA
OPCIONES EMPRESARIALES DEL NOROESTE
LIBERTAD
CLS
INDEVAL

For PEN currency:

Bank Name
Banco Central de Reserva
Banco de Crédito del Perú
Interbank
Citibank
Scotiabank
BBVA Continental
Banco de la Nación
Banco de Comercio
Banco Financiero
Banco Interamericano de Finanzas (BIF)
Crediscotia Financiera
Mi Banco
Banco GNB Perú S.A.
Banco Falabella
Santander
Caja Metropolitana de Lima
Caja Municipal de Ahorro y Crédito Piura SAC
Caja Municipal de Ahorro y Crédito Trujillo
Caja Municipal de Ahorro y Crédito Arequipa
Caja Municipal de Ahorro y Crédito Sullana
Caja Municipal de Ahorro y Crédito Cuzco
Caja Municipal de Ahorro y Crédito Huancayo

For UYU currency:

Bank Name
BROU - Banco de la República Oriental del Uruguay
Banco Hipotecario del Uruguay
Banco Bandes
Banco ITAU
Scotiabank
Banco Santander

Bank Name
Banco Bilbao Vizcaya Argentaria
HSBC Bank
Banque Heritage
Citibank N.A. Sucursal
Banco de la Nación Argentina

Successful Response

```
stdClass Object
(
    [transaction_type] => bank_payout
    [status] => pending_async
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:16.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 50000
    [currency] => INR
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bank_payout</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:16Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>50000</amount>
  <currency>INR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => bank_payout
    [status] => error
    [mode] => live
    [transaction_id] => 1196432505475 01c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 110
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:16.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 50000
    [currency] => INR
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bank_payout</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>110</code>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:16Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>50000</amount>
  <currency>INR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

BITPAY PAYOUT

BitPay Payout is a crypto currency payout method where merchants are requesting payouts in FIAT currency and the funds are transferred in Bitcoin equivalent to a crypto wallet address.

BitPay Payout is an asynchronous transaction type supported through the Processing API, Virtual Terminal and Web Payment Form.

The payout requests are processed once a day at 11:00 GMT and the settlement usually takes 24 hours.

> For amounts greater than 3000 USD or equivalent in other currency, additional KYC authentication might be required by BitPay

> Each transaction has amount limits of minimum 1 USD and maximum of 950 000 USD or its equivalent in EUR

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Crypto\BitPay\Payout');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('2000')
        ->setCurrency('USD')
        ->setCryptoAddress('n1jE32b88mtT7UETWvV6WgrV5AUVTPDxW8')
        ->setCryptoWalletProvider('other')
        ->setCustomerEmail('travis@example.com');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>bitpay_payout</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>2000</amount>
    <currency>USD</currency>
    <crypto_address>n1jE32b88mtT7UETWvV6WgrV5AUVTPDxW8</crypto_address>
    <crypto_wallet_provider>other</crypto_wallet_provider>
    <customer_email>travis@example.com</customer_email>
  </payment_transaction>'
```

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Crypto\BitPay\Payout');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setAmount('500000')
        ->setCurrency('USD')
        ->setCryptoAddress('n1jE32b88mtT7UETWvV6WgrV5AUVTPDxW7')
        ->setCryptoWalletProvider('kraken')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>bitpay_payout</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <amount>500000</amount>
    <currency>USD</currency>
    <crypto_address>n1jE32b88mtT7UETWvV6WgrV5AUVTPDxW7</crypto_address>
    <crypto_wallet_provider>kraken</crypto_wallet_provider>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **bitpay_payout**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
notification_url	required	url	URL at merchant where gateway sends outcome of transaction.

Parameter	Required	Format	Description
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
customer_email	required*	e-mail address	Must contain valid e-mail of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
crypto_address	required	string(255)	Valid crypto address where the funds will be received
crypto_wallet_provider	required	string(255)	If crypto wallet provider is not in the table below, you must send 'other'
billing_address	required*		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Crypto wallet providers with additional requirements

crypto wallet provider	description	website
BitGo	crypto wallet provider	official website
Uphold	crypto wallet provider	official website
Circle	crypto exchange	official website
Coinbase	crypto wallet provider	official website
GDax	crypto exchange	official website
Gemini	crypto exchange	official website
ITBit	crypto exchange	official website
Kraken	crypto exchange	official website

Address fields are required in case the crypto wallet provider is in the list above and the payout amount is greater than 3000 USD or the equivalent in other currency

Successful Response

```
stdClass Object
(
    [transaction_type] => bitpay_payout
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:17.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 500000
    [currency] => USD
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bitpay_payout</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <timestamp>2021-02-04T15:26:17Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>500000</amount>
  <currency>USD</currency>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Error Response

```
stdClass Object
(
    [transaction_type] => bitpay_payout
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] =>
    [code] => 940
    [technical_message] => Bitcoin address is invalid
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:17.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 2000
    [currency] => USD
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bitpay_payout</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <payment_transaction>response_code</payment_transaction>
  <code>940</code>
  <technical_message>Bitcoin address is invalid</technical_message>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:17Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>2000</amount>
  <currency>USD</currency>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

EZEECARD PAYOUT

eZeeCard Payout is a sync based payout method. It's merchant initiated and can only reference specific transaction types:

- Capture
- Sale
- Sale3d
- InitRecurringSale
- InitRecurringSale3d
- RecurringSale

Those need to have been completed using a card issued by our Issuing API.

> eZeeCard Payout is available through Processing API and VT only!

> eZeeCard Payout has amount limits of minimum 10 EUR and maximum of 800 EUR per transaction or its equivalent in other currencies

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\EzeeCardPayout');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('1000')
        ->setCurrency('EUR')
        ->setReferenceId('43672');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>ezeecard_payout</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>1000</amount>
    <currency>EUR</currency>
    <reference_id>43672</reference_id>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **ezeecard_payout**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
reference_id	required	string(32)	Unique id returned by corresponding transaction

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => ezeecard_payout
    [status] => approved
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [mode] => live
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:17.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [amount] => 1000
    [currency] => EUR
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ezeecard_payout</transaction_type>
  <status>approved</status>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-04T15:26:17Z</timestamp>
  <amount>1000</amount>
  <currency>EUR</currency>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
transaction_id	string(255)	Unique transaction id defined by merchant
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Error Response

```
stdClass Object
(
    [transaction_type] => ezeecard_payout
    [status] => error
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [technical_message] => invalid deposit transaction
    [message] =>
    [mode] => live
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:17.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [amount] => 1000
    [currency] => EUR
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>ezeecard_payout</transaction_type>
  <status>error</status>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <technical_message>invalid deposit transaction</technical_message>
  <payment_transaction>message</payment_transaction>
  <mode>live</mode>
  <timestamp>2021-02-04T15:26:17Z</timestamp>
  <amount>1000</amount>
  <currency>EUR</currency>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states

Parameter	Type	Description
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
transaction_id	string(255)	Unique transaction id defined by merchant
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

PAYOUT

Payouts are credits without a reference transaction and as such are highly regulated and need specific gateway terminal configuration, so be sure to contact the IT Support team at tech-support@e-comprocessing.com in case you want Payouts to be enabled. A valid bank account number needs to be provided.

Using a payout, the amount is billed to the customer's credit card. It can be reversed via a void transaction on the same day of the transaction.

Both Visa and Mastercard/Maestro Payouts are authorized real-time.

Note that for exceptional cases with some countries Visa OCTS will not be authorized through the schemes but batched for offline settlement on the same day. This means that the authorization code and issuer response code will not be available only for them.

This transaction type supports Tokenization.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Payout');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.PayoutRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PayoutRequest request = new PayoutRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.payout(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>payout</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4200000000000000</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
</payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **payout**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
gaming	optional	"true"	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
card_holder	required	string(255)	Full name of customer as printed on credit card (first name and last name at least)
card_number	required	13 to 16 digits	Complete cc number of customer
cvv	required*	3 to 4 digits	cvv of cc, requirement is based on terminal configuration
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card
token	optional	string(36)	See Tokenization for more details. If present, the cardholder parameters can be omitted. Cannot be set together with `remember_card`
remember_card	optional	"true"	See Tokenize. Tokenizes cardholder parameters. Cannot be set together with `token`
consumer_id	optional	string(10)	See Consumers and Tokenization. Combine with `remember_card` to tokenize or with `token` to use token
source_of_funds	optional	string	Specify the source of funds with one of `credit`, `debit`, `prepaid`, `cash`, `other_debit_account`, `other_credit_account`.
credential_on_file	required*		See Credential On File (COF) for more details
initial_customer_initiated	required*	string(18)	Initial transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
subsequent_customer_initiated	required*	string(18)	Subsequent transaction initiated by customer. Required for external tokenization, and optional for gateway-based tokenization
merchant_unscheduled	optional	string(20)	Transaction is initiated by the merchant
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer

Parameter	Required	Format	Description
birth_date	required*	dd-mm-yyyy	Required when MCC is a Financial Services one (e.g. MCC 6012) and either card brand is Visa or Mastercard/Maestro with UK-based merchant, UK-based bin (domestic), and DEBIT card type
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
fx_rate_id	optional	integer	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => payout
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [consumer_id] => 123456
    [token] => ee946db8-d7db-4bb7-b608-b65b153e127d
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:17.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```xml
<payment_response content=[
    <transaction_type content=[payout]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <consumer_id content=[123456]>
    <token content=[ee946db8-d7db-4bb7-b608-b65b153e127d]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <timestamp content=[2021-02-04T15:26:17Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```json
{
    transaction_type: "payout",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    consumer_id: "123456",
    token: "ee946db8-d7db-4bb7-b608-b65b153e127d",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    timestamp: "2021-02-04T15:26:17Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>payout</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:26:17Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
consumer_id	string(10)	Consumer unique reference. See Consumers
token	string(36)	Plain-text token value. See Tokenization
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).

Parameter	Type	Description
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => payout
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] => 57
    [code] => 340
    [technical_message] => billing_address[zip_code] is invalid!
    [message] => billing_address[zip_code] is invalid!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:17.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[payout]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[57]>
    <code content=[340]>
    <technical_message content=[billing_address[zip_code] is invalid!]>
    <message content=[billing_address[zip_code] is invalid!]>
    <timestamp content=[2021-02-04T15:26:17Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "payout",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "57",
    code: "340",
    technical_message: "billing_address[zip_code] is invalid!",
    message: "billing_address[zip_code] is invalid!",
    timestamp: "2021-02-04T15:26:17Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>payout</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <response_code>57</response_code>
  <code>340</code>
  <technical_message>billing_address[zip_code] is invalid!</technical_message>
  <message>billing_address[zip_code] is invalid!</message>
  <timestamp>2021-02-04T15:26:17Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

MONEY TRANSFER PAYOUT

Money transfer payout is a standard payout with additional parameters. The section and parameters below are optional and to be considered only when present.

Money transfers: account_to_account, person_to_person, wallet_transfer, funds_transfer.

The transaction is not a result of a business operation but rather a pure funds movement from one account (card or non-card) to another (card).

Bear in mind that the sender of the funds in this case is not a merchant, but a consumer.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Payout');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setMoneyTransfer('{"type"=>"account_to_account", "sender_account_number"=>"DE91100000000123456789", "sender_address"=>{"first_name"=>"John", "last_name"=>"Smith", "country"=>"JoDEhn", "city"=>"Berlin

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.PayoutRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PayoutRequest request = new PayoutRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setMoneyTransfer("{"type"=>"account_to_account", "sender_account_number"=>"DE91100000000123456789", "sender_address"=>{"first_name"=>"John", "last_name"=>"Smith", "country"=>"JoDEhn", "city"=>"Berl

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.payout(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "money_transfer": {
      "type": "account_to_account",
      "sender_account_number": "DE91100000000123456789",
      "sender_address": {
        "first_name": "John",
        "last_name": "Smith",
        "country": "JoDEhn",
        "city": "Berlin",
        "zip_code": "10115",
        "address1": "1 Kaiserdamm Blvd, Berlin"
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>payout</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <money_transfer>
      <type>account_to_account</type>
      <sender_account_number>DE91100000000123456789</sender_account_number>
      <sender_address>
        <first_name>John</first_name>
        <last_name>Smith</last_name>
        <country>JoDEhn</country>
        <city>Berlin</city>
        <zip_code>10115</zip_code>
        <address1>1 Kaiserdamm Blvd, Berlin</address1>
      </sender_address>
    </money_transfer>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
money_transfer	optional		Money transfer Parameters
type	required	string	The type of money transfer. It can be account_to_account, person_to_person, wallet_transfer, funds_transfer
sender_account_number	required	string(33)	Sender account number
sender_address	required		
first_name	required	string(255)	Sender first name
last_name	required	string(255)	Sender last name
country	required	string(2)	Sender Country code in ISO 3166
city	required	string(255)	Sender City
zip_code	required	string	Sender ZIP code
address1	required	string(255)	Sender Primary address
state	required*	string(2)	Sender State code in ISO 3166-2, required for USA and Canada

`required* = conditionally required`

The Sender name is split in two fields 'first name' and 'last name'. Maximum length of these fields must be 24 characters. Ex. 'John Doe' with space between them must not exceed 25 characters.

Money transfer is supported only by Visa.

Money transfer type
account_to_account
person_to_person
wallet_transfer
funds_transfer

Successful Response

```
stdClass Object
(
    [transaction_type] => payout
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] =>
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:17.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
)
```

```
<payment_response content=[
    <transaction_type content=[payout]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[]>
    <timestamp content=[2021-02-04T15:26:17Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
]>
```

```
{
    transaction_type: "payout",
    status: "approved",
    mode: "live",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "",
    timestamp: "2021-02-04T15:26:17Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
}
```

```
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>payout</transaction_type>
    <status>approved</status>
    <mode>live</mode>
    <transaction_id>1196432505475 01c79d8295</transaction_id>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
    <payment_transaction>response_code</payment_transaction>
    <timestamp>2021-02-04T15:26:17Z</timestamp>
    <descriptor>Descriptor one</descriptor>
    <amount>100</amount>
    <currency>USD</currency>
  </payment_transaction>
```


Error Response


```
stdClass Object
(
    [transaction_type] => payout
    [status] => error
    [mode] => live
    [transaction_id] => 1196432505475 01c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => money_transfer_type is not supported. Please select one of account_to_account, person_to_person, wallet_transfer, funds_transfer
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:17.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
)
```

```
<payment_response content=[
    <transaction_type content=[payout]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[money_transfer_type is not supported. Please select one of account_to_account, person_to_person, wallet_transfer, funds_transfer]>
    <message content=[Please check input data for errors!]>
    <timestamp content=[2021-02-04T15:26:17Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
]>
```

```
{
    transaction_type: "payout",
    status: "error",
    mode: "live",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "340",
    technical_message: "money_transfer_type is not supported. Please select one of account_to_account, person_to_person, wallet_transfer, funds_transfer",
    message: "Please check input data for errors!",
    timestamp: "2021-02-04T15:26:17Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>payout</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>money_transfer_type is not supported. Please select one of account_to_account, person_to_person, wallet_transfer, funds_transfer</technical_message>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:17Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

NON-MONEY TRANSFER PAYOUT

Non-money transfer payout is a standard payout with additional parameters. The section and parameters below are optional and to be considered only when present.

Non-money transfer types are: b2b_supplier, loyalty, funds_disbursment, merchant_settlement, prepaid_card_load.

The transaction is a result of a business operation.

Bear in mind that the sender of the funds in this case is a merchant.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Payout');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setMoneyTransfer('{"type"=>"loyalty"}');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.PayoutRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    PayoutRequest request = new PayoutRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setMoneyTransfer("{"type"=>"loyalty"}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.payout(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "money_transfer": {
      "type": "loyalty"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>payout</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <money_transfer>
      <type>loyalty</type>
    </money_transfer>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
money_transfer	optional		Non-money transfer Parameters
type	required	string	The type of non-money transfer. It can be b2b_supplier, loyalty, funds_disbursment, merchant_settlement, prepaid_card_load

`required* = conditionally required`

Non-money transfer is supported only by Visa.

The listed non-money transfer types are allowed for all merchant category codes (MCCs).

Non-money transfer type

Non-money transfer type
b2b_supplier
loyalty
funds_disbursment
merchant_settlement
prepaid_card_load

Successful Response

```
stdClass Object
(
    [transaction_type] => payout
    [status] => approved
    [mode] => live
    [transaction_id] => 1196432505475 01c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [response_code] =>
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:18.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
)
```

```
<payment_response content=[
    <transaction_type content=[payout]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <response_code content=[]>
    <timestamp content=[2021-02-04T15:26:18Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
]>
```

```
{
    transaction_type: "payout",
    status: "approved",
    mode: "live",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    response_code: "",
    timestamp: "2021-02-04T15:26:18Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
}
```

```
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>payout</transaction_type>
    <status>approved</status>
    <mode>live</mode>
    <transaction_id>1196432505475 01c79d8295</transaction_id>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
    <payment_transaction>response_code</payment_transaction>
    <timestamp>2021-02-04T15:26:18Z</timestamp>
    <descriptor>Descriptor one</descriptor>
    <amount>100</amount>
    <currency>USD</currency>
  </payment_transaction>
```

Error Response

```
stdClass Object
(
    [transaction_type] => payout
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => money_transfer_type is not supported. Please select one of b2b_supplier, loyalty, funds_disbursment, merchant_settlement, prepaid_card_load
    [message] => Please check input data for errors!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:18.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
)
```

```
<payment_response content=[
    <transaction_type content=[payout]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[money_transfer_type is not supported. Please select one of b2b_supplier, loyalty, funds_disbursment, merchant_settlement, prepaid_card_load]>
    <message content=[Please check input data for errors!]>
    <timestamp content=[2021-02-04T15:26:18Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
]>
```

```
{
    transaction_type: "payout",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "340",
    technical_message: "money_transfer_type is not supported. Please select one of b2b_supplier, loyalty, funds_disbursment, merchant_settlement, prepaid_card_load",
    message: "Please check input data for errors!",
    timestamp: "2021-02-04T15:26:18Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>payout</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>money_transfer_type is not supported. Please select one of b2b_supplier, loyalty, funds_disbursment, merchant_settlement, prepaid_card_load</technical_message>
  <message>Please check input data for errors!</message>
  <timestamp>2021-02-04T15:26:18Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

SCT PAYOUT

SCT payouts are Sepa-based payouts to consumers done without a reference transaction and as such are regulated and need specific gateway terminal configuration, so be sure to contact the IT Support team at tech-support@e-comprocessing.com) in case you want SCT payouts to be enabled.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\SDD\Payout');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('EUR')
        ->setIban('DE09100100101234567891')
        ->setBic('PBNKDEFFXXX')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingCountry('DE');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.sdd.SDDPayoutRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SDDPayoutRequest request = new SDDPayoutRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("EUR");
    request.setIban("DE09100100101234567891");
    request.setBic("PBNKDEFFXXX");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingCountry("DE");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sct_payout(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "EUR",
    "iban": "DE09100100101234567891",
    "bic": "PBNKDEFFXXX",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "country": "DE"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sct_payout</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>EUR</currency>
    <iban>DE09100100101234567891</iban>
    <bic>PBNKDEFFXXX</bic>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <country>DE</country>
    </billing_address>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
iban	required	string(34)	Customer's IBAN number
bic	required	string(11)	SWIFT/BIC code of the customer's bank
billing_address	required		See Required vs Optional API params for details
first_name	required	string(255)	Customer first name
last_name	required	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name

Parameter	Required	Format	Description
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **sct_payout**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
iban	required	string(34)	Customer's IBAN number
bic	required	string(11)	SWIFT/BIC code of the customer's bank
billing_address	required		See Required vs Optional API params for details
first_name	required	string(255)	Customer first name
last_name	required	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries:

Allowed countries include supported countries for SDD Init Recurring Sale and the list below:

Country Name	Country Code
Bulgaria	BG

Country Name	Country Code
Croatia	HR
Czech Republics	CZ
Denmark	DK
United Kingdom	UK
Hungary	HU
Iceland	IS
Liechtenstein	LI
Norway	NO
Poland	PL
Romania	RO
Sweden	SE
Switzerland	CH

Successful Response

```
stdClass Object
(
    [transaction_type] => sct_payout
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:18.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[sct_payout]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:18Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "sct_payout",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:18Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sct_payout</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:18Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response


```
stdClass Object
(
    [transaction_type] => sct_payout
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 340
    [technical_message] => expiration_year is invalid
    [message] => expiration_year is invalid
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:18.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => EUR
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[sct_payout]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[340]>
    <technical_message content=[expiration_year is invalid]>
    <message content=[expiration_year is invalid]>
    <timestamp content=[2021-02-04T15:26:18Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[EUR]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "sct_payout",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "340",
    technical_message: "expiration_year is invalid",
    message: "expiration_year is invalid",
    timestamp: "2021-02-04T15:26:18Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "EUR",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sct_payout</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>expiration_year is invalid</technical_message>
  <message>expiration_year is invalid</message>
  <timestamp>2021-02-04T15:26:18Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

AFRICAN MOBILE PAYOUT

African Mobile Payout, or otherwise known as Disbursement, is an APM used to process Mobile network operator payments. It is an async payment method and will be approved once the payment is processed with the Mobile network operator

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>african_mobile_payout</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>KES</currency>
   <customer_email>barney.rubble@example.com</customer_email>
   <customer_phone>254701123456</customer_phone>
   <operator>SAFARICOM</operator>
   <target>000010</target>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Nairobi</city>
     <country>KE</country>
   </billing_address>
   <risk_params>
     <user_id>123456</user_id>
   </risk_params>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **african_mobile_payout**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
operator	required	string(20)	Name of the Mobile network operator (MNO) which should process the transaction
target	required	string(20)	Number of the Paybill for which the transaction is intended
customer_phone	required	string(32)	Must contain valid phone number of customer
customer_email	required*	e-mail address	Must contain valid e-mail of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code

Parameter	Required	Format	Description
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries, currencies, operators and payment method:

Country code	Currency code	Operator	Payment method
GH	GHS	AIRTEL	Airtel Money
GH	GHS	MTN	MTN Mobile Money
GH	GHS	TIGO	Tigo Cash
GH	GHS	VODACOM	M-PESA
KE	KES	AIRTEL	Airtel Money
KE	KES	SAFARICOM	M-PESA
MZ	MZN	MOVITEL	e-Mola
MZ	MZN	VODACOM	M-PESA
RW	RWF	MTN	MTN Mobile Money
RW	RWF	TIGO	Tigo Cash
TZ	TZS	AIRTEL	Airtel Money
TZ	TZS	TIGO	Tigo Cash
TZ	TZS	VODACOM	M-PESA
UG	UGX	AIRTEL	Airtel Money
UG	UGX	MTN	MTN Mobile Money

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>african_mobile_payout</transaction_type>
  <status>pending_async</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:18Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>KES</currency>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

Parameter	Type	Description
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>african_mobile_payout</transaction_type>
  <status>error</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <message>Something went wrong, please contact support!</message>
  <technical_message>operator is not supported!</technical_message>
  <timestamp>2021-02-04T15:26:18Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>KES</currency>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
message	string(255)	Human readable error message which can be displayed to users.
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

TRANSFERTO PAYOUT

TransferTo Payout is an APM which provides 3 different payment services: BankAccount, MobileWallet and CashPickup. Merchant sends money to a consumer. Money are delivered through a Payer institution which supports one of the 3 services and has specific requirements on the transaction's amount and required fields. The process is async and once the TransferTo processes the transaction, a notification is received and the status is updated.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>transfer_to_payout</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>Funding</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <amount>100</amount>
  <currency>USD</currency>
  <customer_email>barney.rubble@example.com</customer_email>
  <payer_id>7</payer_id>
  <bank_account_number>0842024000</bank_account_number>
  <billing_address>
    <last_name>Rubble</last_name>
  </billing_address>
</payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **transfer_to_payout**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required*	e-mail address	Must contain valid e-mail of customer
payer_id	required	string	ID of the Payer used to deliver the money through one of the 3 services. For more details regarding how the available payers are populated see Retrieve Payers API
bank_account_number	required*	string	Bank identification number of the customer. *Requirement based on the Payer
indian_financial_system_code	required*	string	Bank code of the bank in which the consumer resides. *Requirement based on the Payer
msisdn	required*	string	Phone number for payment to bank account and wallet registration number for payment to wallet. Min 6 and max 32 digits. Numeric values only (can contain “+” at start or “(“ , ”)” , ”-“). *Requirement based on the Payer
branch_number	required*	string	Branch number. *Requirement based on the Payer
account_type	required*	string	Account type. Allowed values: CHECKING, SAVINGS, DEPOSIT, OTHERS. *Requirement based on the Payer
registered_name	required*	string	Registered name of the business. *Requirement based on the Payer
registration_number	required*	string	Registration number. *Requirement based on the Payer
document_reference_number	required*	string	Reference number for the contract. *Requirement only for Business-to-Business (B2B) workflow
purpose_of_remittance	required*	string	Identification type. Allowed values: FAMILY_SUPPORT, EDUCATION, GIFT_AND_DONATION, MEDICAL_TREATMENT, MAINTENANCE_EXPENSES, TRAVEL, SMALL_VALUE_REMITTANCE, LIBERALIZED_REMITTANCE, OTHER. *Requirement only for Business-to-Business (B2B) workflow
iban	required*	string	Bank account number in IBAN format. *Requirement based on the Payer
id_type	required*	string	Identification type. Allowed values: PASSPORT, NATIONAL_ID, DRIVING_LICENSE, SOCIAL_SECURITY, TAX_ID, SENIOR_CITIZEN_ID, BIRTH_CERTIFICATE, VILLAGE_ELDER_ID, RESIDENT_CARD, ALIEN_REGISTRATION, PAN_CARD, VOTERS_ID, HEALTH_CARD, EMPLOYER_ID, OTHER. *Requirement based on the Payer
id_number	required*	string	Identification number. *Requirement based on the Payer
sender_date_of_birth	required*	string	Date of birth with the following format YYYY-MM-DD. *Requirement based on the Payer
sender_last_name	required*	string	First name of the sender. *Requirement based on the Payer
sender_first_name	required*	string	First name of the sender. *Requirement based on the Payer
sender_country_iso_code	required*	string	Three-letter country code of the sender. *Requirement based on the Payer
sender_id_number	required*	string	Identification number of the sender. *Requirement based on the Payer

Parameter	Required	Format	Description
sender_nationality_country_iso_code	required*	string	Three-letter country code corresponding to the nationality of the sender. *Requirement based on the Payer
sender_address	required*	string	First line of address of the sender. *Requirement based on the Payer
sender_occupation	required*	string	Occupation of the sender. *Requirement based on the Payer
sender_beneficiary_relationship	required*	string	Relationship between the sender and the beneficiary. *Requirement based on the Payer
sender_postal_code	required*	string	Postal code of the sender. *Requirement based on the Payer
sender_city	required*	string	City of the sender. *Requirement based on the Payer
sender_msisdn	required*	string	Phone number for payment to bank account and wallet registration number for payment to wallet. Min 6 and max 32 digits. Numeric values only (can contain “+” at start or “(“ , ”)” , ”-“). *Requirement based on the Payer
sender_gender	required*	string	Gender of the sender. *Requirement based on the Payer
sender_id_type	required*	string	Identification type of the sender. Allowed values: PASSPORT, NATIONAL_ID, DRIVING_LICENSE, SOCIAL_SECURITY, TAX_ID, SENIOR_CITIZEN_ID, BIRTH_CERTIFICATE, VILLAGE_ELDER_ID, RESIDENT_CARD, ALIEN_REGISTRATION, PAN_CARD, VOTERS_ID, HEALTH_CARD, EMPLOYER_ID, OTHER. *Requirement based on the Payer
sender_province_state	required*	string	Province State of the sender. *Requirement based on the Payer
sender_source_of_funds	required*	string	Source of funds of the sender. *Requirement based on the Payer
sender_country_of_birth_iso_code	required*	string	Three-letter country code corresponding to the country of birth of the sender. *Requirement based on the Payer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(3)	Three-letter country code in alpha-3 format

`required* = conditionally required`

Supported currencies:

Currency
EUR
GBP
HKD
USD

Supported destination countries and currencies:

Country	Country Code	Currency
Brazil	BRA	BRL
China	CHN	CNY
Indonesia	IDN	IDR
Malaysia	MYS	MYR
Philippines	PHL	PHP
Thailand	THA	THB
Argentina	ARG	ARS
Chile	CHL	CLP
Mexico	MEX	MXN
Peru	PER	PEN

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>transfer_to_payout</transaction_type>
  <status>pending_async</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:18Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>transfer_to_payout</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>910</code>
  <technical_message>Payer is currently unavailable</technical_message>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:18Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**

Parameter	Type	Description
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Mobile Payments

APPLE PAY

Apple Pay is a mobile payment solution available on iOS devices with Touch ID / Face ID support. Apple Pay allows shoppers to purchase with credit and debit cards linked to their devices.

Payment Object structure

```
{
  "token": {
    "paymentData": { ... },
    "paymentMethod": { ... },
    "transactionIdentifier": "32b...4f3"
  },
  "billingContact": { ... },
  "shippingContact": { ... }
}
```

To use the Apple Pay, your application should be set up with public, private keys and payment processing certificate. Please contactech-support@e-comprocessing.com to enable Apple Pay payments.

Once a payment authorized by the customer in the merchant's application, the Apple Pay APIs will return a Payment Object containing the payment data (Encrypted Payment Token) with customer information to the merchant's application. On the right is an example of the Payment Object structure that will be returned to the merchant's application.

Once a Payment Object received, it can be used to create an Apple Pay payment transaction. To create an Apple Pay payment transaction you should specify the Encrypted Payment Token in the `<payment_token>` tag and the payment type you need in the `<payment_type>` tag. To specify Encrypted Payment Token use the value of the `token` field of the received Payment Object.

The following payment types are supported:

Payment type	Description
authorize	behaves like common authorize transaction
recurring	behaves like common init_recurring_sale transaction

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>apple_pay</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <payment_type>authorize</payment_type>
   <payment_token>
     {
       "paymentData": { ... },
       "paymentMethod": { ... },
       "transactionIdentifier": "32B...4F3"
     }
   </payment_token>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>100</amount>
   <currency>USD</currency>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <business_attributes>
     <event_start_date>05-03-2021</event_start_date>
     <event_end_date>17-03-2021</event_end_date>
     <event_organizer_id>20192375</event_organizer_id>
     <event_id>1912</event_id>
   </business_attributes>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **apple_pay**
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_token	required		Encrypted Payment Token
payment_type	required	string	Use either **authorize** for Authorize or **recurring** for Recurring transactions
usage	optional	string(255)	Description of the transaction for later use.
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
birth_date	required*	dd-mm-yyyy	Required when MCC is a Financial Services one (e.g. MCC 6012) and either card brand is Visa or Mastercard/Maestro with UK-based merchant, UK-based bin (domestic), and DEBIT card type
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
document_id	required*	sring(20)	Document ID of the consumer. See Document ID Parameter for more details.
business_attributes	required*		Check business attributes section.
event_start_date	required*	dd-mm-yyyy	The date when event starts in format dd-mm-yyyy
event_end_date	required*	dd-mm-yyyy	The date when event ends in format dd-mm-yyyy
event_organizer_id	required*	string	
event_id	required*	string	
date_of_order	required*	dd-mm-yyyy	The date when order was placed in format dd-mm-yyyy
delivery_date	required*	dd-mm-yyyy	Date of the expected delivery in format dd-mm-yyyy
name_of_the_supplier	required*	string	
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name

Parameter	Required	Format	Description
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>apple_pay</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <consumer_id>123456</consumer_id>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <authorization_code>345678</authorization_code>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:26:19Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
consumer_id	string(10)	Consumer unique reference. See Consumers
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.

Parameter	Type	Description
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
redirect_url	url	URL where user has to be redirected to complete payment process. It is available for asynchronous mode
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.
scheme_transaction_identifier	string(32)	Id defined by card schemes. Corresponds to NETWORK DATA (field 63) for MasterCard or TRANS ID (field 62.2/125) for VISA.

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>apple_pay</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>340</code>
  <technical_message>expiration_year is invalid</technical_message>
  <message>expiration_year is invalid</message>
  <timestamp>2021-02-04T15:26:19Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Parameter	Type	Description
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

AFRICAN MOBILE SALE

African Mobile Sale, otherwise known as Charge, is an APM used to process Mobile network operator payments. It is an async payment method and will be approved once the payment is processed with the Mobile network operator

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>african_mobile_sale</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <amount>100</amount>
   <currency>KES</currency>
   <customer_email>barney.rubble@example.com</customer_email>
   <customer_phone>254701123456</customer_phone>
   <operator>SAFARICOM</operator>
   <target>000010</target>
   <billing_address>
     <first_name>Barney</first_name>
     <last_name>Rubble</last_name>
     <address1>14, Nerazdelni str</address1>
     <zip_code>1407</zip_code>
     <city>Nairobi</city>
     <country>KE</country>
   </billing_address>
   <risk_params>
     <user_id>123456</user_id>
   </risk_params>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **african_mobile_sale**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
return_success_url	required	url	URL where customer is sent to after successful payment
return_failure_url	required	url	URL where customer is sent to after unsuccessful payment
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
operator	required	string(20)	Name of the Mobile network operator (MNO) which should process the transaction
target	required	string(20)	Number of the Paybill for which the transaction is intended
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required	string(32)	Must contain valid phone number of customer
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name

Parameter	Required	Format	Description
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Supported countries, currencies, operators and payment method:

Country code	Currency code	Operator	Payment method
GH	GHS	VODACOM	M-PESA
KE	KES	SAFARICOM	M-PESA
UG	UGX	AIRTEL	Airtel Money
UG	UGX	MTN	MTN Mobile Money

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>african_mobile_sale</transaction_type>
  <status>pending_async</status>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:19Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>KES</currency>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

Parameter	Type	Description
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>african_mobile_sale</transaction_type>
  <status>error</status>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <message>Something went wrong, please contact support!</message>
  <technical_message>operator is not supported</technical_message>
  <timestamp>2021-02-04T15:26:19Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>KES</currency>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
message	string(255)	Human readable error message which can be displayed to users.
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Reversals

Reversal transactions serve to change the state of the original transaction and return money back to customer's account. They can be used with Card, 3DS Card, and different APM transactions.

REFUND

Refunds allow to return already billed amounts to customers.

The amount can be fully or partially refunded. Refunds can only be done as follow transactions on former successfully processed transactions:

- Card transactions
- 3DS Card transactions
- Wallets
- Vouchers
- Online Banking ePayments
- Cash payments
- Gift Cards

Therefore, the reference id for the corresponding transaction is mandatory.

This transaction type supports Level 3 travel data.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Refund');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('43672')
        ->setAmount('100')
        ->setCurrency('USD');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.RefundRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    RefundRequest request = new RefundRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReferenceId("43672");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.refund(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "reference_id": "43672",
    "amount": "100",
    "currency": "USD"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>refund</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <reference_id>43672</reference_id>
    <amount>100</amount>
    <currency>USD</currency>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **refund**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	Unique id returned by corresponding transaction
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
beneficiary_bank_code	required*	string	The bank code of the beneficiary's bank.
beneficiary_name	required*	string	The name of the beneficiary's bank.
beneficiary_account_number	required*	string	The account number of the beneficiary in his bank.
bank	optional	string	Name of the customer's bank
bank_branch	optional	string	Name of the Bank branch
bank_account	optional	string	Bank account number of the customer.
bank_account_type	optional	string(1)	The type of account. C: for Checking accounts, S: for Savings accounts, I: for International accounts

`required* = conditionally required`

Beneficiary params will be required when refunding an online banking transaction with MYR currency. Contactech-support for more information.

Successful Response

```
stdClass Object
(
    [transaction_type] => refund
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:20.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
)
```

```
<payment_response content=[
    <transaction_type content=[refund]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <timestamp content=[2021-02-04T15:26:20Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
]>
```

```
{
    transaction_type: "refund",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    timestamp: "2021-02-04T15:26:20Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>refund</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:26:20Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**

Parameter	Type	Description
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Error Response

```
stdClass Object
(
    [transaction_type] => refund
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 410
    [technical_message] => no approved reference transaction found
    [message] => no approved reference transaction found
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:20.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
)
```

```
<payment_response content=[
    <transaction_type content=[refund]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[410]>
    <technical_message content=[no approved reference transaction found]>
    <message content=[no approved reference transaction found]>
    <timestamp content=[2021-02-04T15:26:20Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
]>
```

```
{
    transaction_type: "refund",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "410",
    technical_message: "no approved reference transaction found",
    message: "no approved reference transaction found",
    timestamp: "2021-02-04T15:26:20Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>refund</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>410</code>
  <technical_message>no approved reference transaction found</technical_message>
  <message>no approved reference transaction found</message>
  <timestamp>2021-02-04T15:26:20Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**

Parameter	Type	Description
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
code	integer	Error code according to Error code table
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

ASYNC REFUND

Async Refunds allow to return already billed amounts to customers where the transaction is confirmed asynchronously (i.e. the transaction is sent for processing without the client being blocked waiting and once the transaction is complete the client is notified about the result).

The amount can be fully or partially refunded. Async Refunds are only required for a few APMs. Please contact tech-support@e-comprocessing.com for more details.

Similarly to ordinary Refunds, the reference id for the corresponding transaction is mandatory.

> This transaction type supports Level 3 travel data.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>async_refund</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <reference_id>43672</reference_id>
   <amount>100</amount>
   <currency>USD</currency>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **async_refund**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	Unique id returned by corresponding transaction
amount	required	integer > 0	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
beneficiary_bank_code	required*	string	The bank code of the beneficiary's bank.
beneficiary_name	required*	string	The name of the beneficiary's bank.
beneficiary_account_number	required*	string	The account number of the beneficiary in his bank.
bank	optional	string	Name of the customer's bank

Parameter	Required	Format	Description
bank_branch	optional	string	Name of the Bank branch
bank_account	optional	string	Bank account number of the customer.
bank_account_type	optional	string(1)	The type of account. C: for Checking accounts, S: for Savings accounts, I: for International accounts

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>async_refund</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <authorization_code>345678</authorization_code>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:26:20Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>async_refund</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>410</code>
  <technical_message>no approved reference transaction found</technical_message>
  <message>no approved reference transaction found</message>
  <timestamp>2021-02-04T15:26:20Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
code	integer	Error code according to Error code table
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

VOID

Void transactions undo other transactions.

Transactions of types authorize, capture, sale, refund, recurring sale, and init recurring sale along with their 3D variants can be reversed on the same day the transaction took place. The transaction will not show up on the customer's credit card statement if voided on the same day.

Not captured authorize and authorize3d transactions can be voided without a specific timeframe.

The same day is dependent of the timezone of the acquiring bank.

This transaction can also be used to fully reverse a Preauthorization The void time-frame in this case depends on the preauthorization specifics (Cardbrand, Merchant Category Code etc). To learn more about this, navigate to the Full Reversal section.

When reversing transaction using Void while it is in a process of settlement, an error `Transaction already scheduled for settlement!` will be returned.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cancel');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('43672');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.VoidRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    VoidRequest request = new VoidRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setReferenceId("43672");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.cancel(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "reference_id": "43672"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>void</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <reference_id>43672</reference_id>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **void**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	Unique id returned by corresponding transaction

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => void
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [authorization_code] => 345678
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:20.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[void]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <authorization_code content=[345678]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <timestamp content=[2021-02-04T15:26:20Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "void",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    authorization_code: "345678",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    timestamp: "2021-02-04T15:26:20Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>void</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:26:20Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response


```
stdClass Object
(
    [transaction_type] => void
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 420
    [technical_message] => can not do void on void reference
    [message] => can not do void on void reference
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:20.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```xml
<payment_response content=[
    <transaction_type content=[void]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[420]>
    <technical_message content=[can not do void on void reference]>
    <message content=[can not do void on void reference]>
    <timestamp content=[2021-02-04T15:26:20Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```json
{
    transaction_type: "void",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "420",
    technical_message: "can not do void on void reference",
    message: "can not do void on void reference",
    timestamp: "2021-02-04T15:26:20Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>void</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>420</code>
  <technical_message>can not do void on void reference</technical_message>
  <message>can not do void on void reference</message>
  <timestamp>2021-02-04T15:26:20Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
code	integer	Error code according to Error code table
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

INVOICE REFUND

Invoice Refunds allow to return already billed amounts to customers.

The amount can be fully or partially refunded. Invoice refunds can only be done on former Invoice Capture (settled) transactions.

Therefore, the `reference_id` for the corresponding transaction is mandatory.

> In case of **secure_invoice** payment type we can invoke purchase amount reduction of not yet captured invoice transaction by setting up **reference_id** from **InvoiceTransaction**.

Then **items** section becomes items to remove from original invoice request.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>invoice_refund</transaction_type>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <payment_type>klarna</payment_type>
   <usage>40208 concert tickets</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <reference_id>43672</reference_id>
   <amount>60</amount>
   <currency>EUR</currency>
   <items>
     <item>
       <item_type>physical</item_type>
       <reference>19-402-USA</reference>
       <name>BatteryPowerPack</name>
       <quantity>1</quantity>
       <unit_price>60</unit_price>
       <tax_rate>0</tax_rate>
       <total_amount>60</total_amount>
       <total_discount_amount>0</total_discount_amount>
       <total_tax_amount>0</total_tax_amount>
       <image_url>https://example.com/image_url</image_url>
       <product_url>https://example.com/product_url</product_url>
       <quantity_unit>pcs</quantity_unit>
       <merchant_data>
         <marketplace_seller_info>Electronic gadgets</marketplace_seller_info>
       </merchant_data>
     </item>
   </items>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **invoice_refund**
transaction_id	required	string(255)	Unique transaction id defined by merchant
payment_type	required	string	Payment provider type: **klarna** / **secure_invoice**
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	Unique id returned by corresponding transaction
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217
items	required		List with items
item_type	required	string(255)	Order line type. Possible values: Supported item types
quantity	required	integer	Non-negative. The item quantity
unit_price	required	integer	Minor units. Includes tax, excludes discount(max value: 100000000)
total_amount	required	integer	Includes tax and discount. Must match (quantity unit price) - total discount amount divided by quantity (max value: 100000000)
reference	optional	string(255)	Article number, SKU or similar
name	optional	string(255)	Descriptive item name
tax_rate	optional	integer	Non-negative. In percent, two implicit decimals. I.e 2500 = 25.00 percent
total_discount_amount	optional	integer	Non-negative minor units. Includes tax
total_tax_amount	optional	integer	Must be within 1 of total amount - total_amount * 10000 / (10000 + tax rate). Negative when type is discount

Parameter	Required	Format	Description
image_url	optional	url	URL to an image that can be later embedded in communications between Klarna and the customer. (max 1024 characters)
product_url	optional	url	URL to an image that can be later embedded in communications between Klarna and the customer. (max 1024 characters)
quantity_unit	optional	string(8)	Unit used to describe the quantity, e.g. kg, pcs... If defined has to be 1-8 characters
product_identifiers	optional		List with product identifiers
brand	optional	string(255)	The product's brand name as generally recognized by consumers. If no brand is available for a product, do not supply any value
category_path	optional	string(255)	The product's category path as used in the merchant's webshop. Include the full and most detailed category and separate the segments with ' > '
global_trade_item_number	optional	string(255)	The product's Global Trade Item Number (GTIN). Common types of GTIN are EAN, ISBN or UPC. Exclude dashes and spaces, where possible
manufacturer_part_number	optional	string(255)	The product's Manufacturer Part Number (MPN), which - together with the brand - uniquely identifies a product. Only submit MPNs assigned by a manufacturer and use the most specific MPN possible
merchant_data	optional		List with merchant data
marketplace_seller_info	optional	string(255)	Information for merchant marketplace

`required* = conditionally required`

Supported item types:

Item Types
physical
discount
shipping_fee
sales_tax
digital
gift_card
store_credit
surcharge

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>invoice_refund</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <timestamp>2021-02-04T15:26:20Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>60</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)

Parameter	Type	Description
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>invoice_refund</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>420</code>
  <technical_message>can not do void on void reference</technical_message>
  <message>can not do void on void reference</message>
  <timestamp>2021-02-04T15:26:20Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>60</amount>
  <currency>EUR</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
mode	string(4)	Mode of the transaction's terminal, can be**test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

BITPAY REFUND

BitPay Refund is a custom refund method which will handle the asynchronous BitPay refund workflow. BitPay refunds can only be done on former transactions. Therefore, the reference id for the corresponding BitPay Sale transaction is mandatory.

BitPay Refund is an asynchronous transaction type.

When a BitPay Refund is requested, BitPay will send an email to the consumer with a request to provide the refund crypto address. This request will be valid for 3 days and will expire afterwards. When the crypto address is provided, the refund will be processed (processing usually takes 24 hours).

A Notification will be sent to the Merchant when the Bitpay refund is completed.

Only full refunds are supported at the moment.

BitPay Refunds can be voided only in the 24-hour processing period.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Crypto\BitPay\Refund');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('43672')
        ->setAmount('100')
        ->setCurrency('USD');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>bitpay_refund</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <reference_id>43672</reference_id>
    <amount>100</amount>
    <currency>USD</currency>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **bitpay_refund**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
reference_id	required	string(32)	The reference_id must be a BitPay Sale transaction
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required	string(3)	Currency code in ISO 4217

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => bitpay_refund
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:21.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bitpay_refund</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <timestamp>2021-02-04T15:26:21Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

Error Response

```
stdClass Object
(
    [transaction_type] => bitpay_refund
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 410
    [technical_message] => no approved reference transaction found
    [message] => no approved reference transaction found
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:21.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>bitpay_refund</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>410</code>
  <technical_message>no approved reference transaction found</technical_message>
  <message>no approved reference transaction found</message>
  <timestamp>2021-02-04T15:26:21Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
code	integer	Error code according to Error code table
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217

PARTIAL REVERSAL

Partial reversal transactions are used in the preauthorization workflow to release a part of the total authorized amount.

> For more information, navigate to the Preauthorization Partial Reversal section in the preauthorization workflow.

PayByLink

PayByLink is a frictionless payment via link. It provides merchants the ability to send a payment link to a customer via email or SMS (configurable), using Virtual Terminal.

WORKFLOW

The merchant can generate a PayByLink payment from the Virtual Terminal (if feature is enabled) by customizing an email template for sending payment link or configuring preferred medium (email/SMS) for sending payment link. When all the needed fields are filled in and the mandatory initial payload is provided, a payment request to the WPF is initiated. As a result of this request (if successful) the response would include redirect URL, which would be sent either via email or SMS to the customer (channel and needed email/phone number should be provided by the merchant when initiating the PayByLink payment). The customer can complete the payment by following the provided URL. It redirects to the merchant's web payment form (WPF) where the redirection workflows are the same as the ones described in the WPF section. The WPF reconcile API could also be used to check the status of any PayByLink initiated payment.

COMBINATION WITH PAY LATER FUNCTIONALITY

The PayByLink triggered payments could be easily combined with the 'Pay Later' functionality (available also for the WPF API). The PayByLink form provides the ability to choose whether the customer would have the option enabled to delay the payment and complete it later. It also gives the ability of enqueuing reminders based on pre-configured values. The reminders include the URL for payment completion as well.

REMINDERS CONFIGURATION

- Up to 3 reminders can be configured for each payment.
- The available channels for sending reminders are `email` and `sms`.
- The time for sending a reminder is set in number of minutes after payment creation.
- The time for sending of each reminder shouldn't be greater that the configured payment lifetime.

For configuration options or any other additional questions you can always contact Tech Support at tech-support@e-comprocessing.com.

Alternative Payment Method External Events

INTRODUCTION

For some alternative payment method (APM) transactions additional events may occur resulting from various actions from the part of the consumer or the merchant. Examples: returned/reversed bank transfers, funds not received, additional bank transfers made using the same transaction reference number etc.

In Genesis these are called external events and are handled in the following manner:

1. A transaction note is created for the external event (visible under the ”Transaction Notes” section on the corresponding payment transaction page in the merchant console).
2. An API notification is sent to the merchant notification endpoint
3. An email notification is sent to the merchant admin email address
4. The original transaction status might be updated depending on the nature of the external event

LIST OF EXTERNAL EVENTS PER ALTERNATIVE PAYMENT METHOD

APM	External event	Description	Status change
InstaDebit Payin	instadebit_payin_return	Payment has been returned to the consumer	voided
InstaDebit Payin	instadebit_payin_adjustment	Payment has been adjusted	none
InstaDebit Payout	instadebit_payout_return	Payment has been returned to the consumer	voided
InstaDebit Payout	instadebit_payout_adjustment	Payment has been adjusted	none
iDebit Payin	idebit_payin_return	Payment has been returned to the consumer	voided
iDebit Payin	idebit_payin_adjustment	Payment has been adjusted	none
iDebit Payout	idebit_payout_return	Payment has been returned to the consumer	voided
iDebit Payout	idebit_payout_adjustment	Payment has been adjusted	none
P24	p24_external_refund	Payment has been rescinded by the consumer or was never received	refunded
Argencard	chargeback_external_event	Payment has been considered fraudulent by the card issuer and was reversed	chargebacked
Aura	chargeback_external_event	Payment has been considered fraudulent by the card issuer and was reversed	chargebacked
Cabal	chargeback_external_event	Payment has been considered fraudulent by the card issuer and was reversed	chargebacked
Cencosud	chargeback_external_event	Payment has been considered fraudulent by the card issuer and was reversed	chargebacked
Elo	chargeback_external_event	Payment has been considered fraudulent by the card issuer and was reversed	chargebacked
Naranja	chargeback_external_event	Payment has been considered fraudulent by the card issuer and was reversed	chargebacked
Nativa	chargeback_external_event	Payment has been considered fraudulent by the card issuer and was reversed	chargebacked
Tarjeta Shopping	chargeback_external_event	Payment has been considered fraudulent by the card issuer and was reversed	chargebacked

EMAIL NOTIFICATION

An email is sent to the merchant admin’s email address detailing the external event type and any other relevant details together with a link to the original payment transaction.

API NOTIFICATION

Merchants will receive API notifications every time Genesis obtains information about APM external events. Notifications are transmitted via HTTP POST (application/x-www-form-urlencoded) to the notification url endpoint provided in the XML request or to the Notification URL from the merchant account

An example notification:

```
&notification_type=apm_external_event
&signature=8216b1b4929c0a41ed44bf51726c10872a78f181b26d1427e15410da56803fc0a2f
&payment_transaction_unique_id=64216236bced683952325b6698b3954a
&category=citadel_payin_chargeback
&priority=info
&code=SDR
&info=Revoked+payment+due+to+instant+payment+funds+not+received
&message=A+Citadel+Payin+transaction+has+been+reversed%2Frevoked.+Payment+has+been+rescinded+by+the+consumer+or+funds+were+never+received+for+the+payment.
&payload=...
```

Parameters:

Name	Type	Description
notification_type	string	constant value ”apm external event”

Name	Type	Description
signature	string	the signature of the notification, should be used to verify the the notification was sent by Genesis
payment_transaction_unique_id	string	unique id of the original transaction, generated by Genesis
category	string	type of the external event
priority	string	can be one of ”info”, ”normal” or ”urgent”
code	string	code for the external event from the APM provider system
info	string	a short description of the external event
message	string	full short description of the external event
payload	string	the raw response for the external event as received from the APM provider

The signature is a security measure meant to ensure that the gateway is really the sender of the notification. It is generated by concatenating the unique id of the payment with your API password and generating a SHA-512 Hash (Hex) of the string:

```
SHA-512 Hash Hex of [payment_transaction_unique_id][Your Merchant API password]
```

Notification signature examples

payment_transaction_unique_id	API password	signature
26aa150ee68b1b2d6758a0e6c44fce4c	50fd87e65eb415f42fb5af4c9cf497662e00b785	c5219b3d385e74496b2b48a549
3f760162ef57a829011e5e2379b3fa17	50fd87e65eb415f42fb5af4c9cf497662e00b785	14519d0db2f7f8f407efccc9b09

```
<?xml version="1.0" encoding="UTF-8"?>
<notification_echo>
  <unique_id>3f760162ef57a829011e5e2379b3fa17</unique_id>
</notification_echo>
```

When receiving the notification, you are required to render an XML page containing the transaction’s payment transaction unique id so that the gateway knows that you have accepted the notification. If the XML is not delivered, the notification is sent periodically as per the rules for notifications delivery.

Advanced risk management with RiskParams

The risk params section in the payment transaction xml allows you to pass user specific values along with the payment transaction. These values may be used by advanced risk management features and checked against a blacklist.

RiskParams can be used in any user triggered payment transaction. User triggered transactions types are Authorize, Authorize3d, Sale, Sale3d, InitRecurringSale, InitRecurringSale3d, and AccountVerification.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // Risk Params
        ->setRiskSsn('987-65-4320')
        ->setRiskMacAddress('12-34-56-78-9A-BC')
        ->setRiskSessionId('1DA53551-5C60-498C-9C18-8456BDBA74A9')
        ->setRiskUserId('1002547')
        ->setRiskUserLevel('vip')
        ->setRiskEmail('test@example.com')
        ->setRiskPhone('+49301234567')
        ->setRiskRemoteIp('245.253.2.12');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Risk Params
    request.setRiskSsn("987-65-4320");
    request.setRiskMacAddress("12-34-56-78-9A-BC");
    request.setRiskSessionId("1DA53551-5C60-498C-9C18-8456BDBA74A9");
    request.setRiskUserId("1002547");
    request.setRiskUserLevel("vip");
    request.setRiskEmail("test@example.com");
    request.setRiskPhone("+49301234567");
    request.setRiskRemoteIp("245.253.2.12");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "risk_params": {
      "ssn": "987-65-4320",
      "mac_address": "12-34-56-78-9A-BC",
      "session_id": "1DA53551-5C60-498C-9C18-8456BDBA74A9",
      "user_id": "1002547",
      "user_level": "vip",
      "email": "test@example.com",
      "phone": "+49301234567",
      "remote_ip": "245.253.2.12"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <risk_params>
      <ssn>987-65-4320</ssn>
      <mac_address>12-34-56-78-9A-BC</mac_address>
      <session_id>1DA53551-5C60-498C-9C18-8456BDBA74A9</session_id>
      <user_id>1002547</user_id>
      <user_level>vip</user_level>
      <email>test@example.com</email>
      <phone>+49301234567</phone>
      <remote_ip>245.253.2.12</remote_ip>
    </risk_params>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description

Parameter	Required	Format	Description
risk_params	optional		
ssn	optional	string(128)	Social Security number or equivalent value for non US customers.
mac_address	optional	string(128)	The customers mac address.
session_id	optional	string(128)	The customers session_id.
user_id	optional	string(128)	The customers user_id.
user_level	optional	string(128)	A value describing the customers trust level, may be used by the risk management for configurable differentiated limits.
email	optional	string(128)	The customers email.
phone	optional	string(128)	The customers phone.
remote_ip	optional	string(128)	The customers ip address.
serial_number	optional	string(128)	Custom serial number.
pan_tail	optional	string(128)	The last 4 digits of the card number.
bin	optional	string(128)	The first 6 digits of the card number.
first_name	optional	string(128)	Customer first name.
last_name	optional	string(128)	Customer last name.
country	optional	string(128)	The country of the customer.
pan	optional	string(128)	The PAN hash of the customer card number.
forwarded_ip	optional	string(128)	MaxMind specific risk param.
username	optional	string(128)	MaxMind specific risk param.
password	optional	string(128)	MaxMind specific risk param.
bin_name	optional	string(128)	MaxMind specific risk param.
bin_phone	optional	string(128)	MaxMind specific risk param.

`required* = conditionally required`

> The risk management needs to be configured to use these values, passing the values alone will not trigger any risk management features.

To use these values for risk management please contactour Risk team.

Credential On File (COF)

As the payment ecosystem has evolved, instances in which a transaction is initiated with a stored credential based on cardholder consent for future use have significantly increased. Growth in digital commerce, together with the emergence of new business models, has increased the number of transactions where a merchant or its agent, a payment facilitator (PF), or a staged digital wallet operator (SDWO) uses cardholder payment credentials (i.e., account details) that they previously stored for future purchases.

In Genesis, the COF indicator can be used for the following transaction types:Account Verification, Authorize, Authorize3D, Sale, Sale3D, InitRecurringSale, InitRecurringSale3D, Payout to mark a transaction as **initial customer initiated, subsequent customer initiated or as unscheduled merchant initiated (UCOF)**

The UCOF transaction uses a previously stored credential for a fixed or variable amount and it does not occur on a scheduled or regularly occurring transaction date. With it, the cardholder has provided consent to the merchant to initiate one or more future transactions. An example of such a transaction is an account auto-top up.

Supported options for Credential On File (COF) field:

COF	Description
initial_customer_initiated	Initial transaction used to store payment credentials for future customer initiated payments while processing. Required for external tokenization, and optional for gateway-based tokenization
subsequent_customer_initiated	Subsequent customer initiated transaction using previously stored payment credentials. Required for external tokenization, and optional for gateway-based tokenization
merchant_unscheduled	For UCOF transaction, the scheme transaction identifier of the initial transaction must be sent in the transaction request. For MasterCard or Maestro UCOF, the scheme settlement date in MMDD format (e.g. 0205) of the initial transaction must be sent in the transaction request.

Currency and Amount Handling

The gateway handles all types of processing currencies, with exponents ranging from 0 (e.g. JPY), 2 (e.g. CNY, USD, EUR, GBP), to 3 (e.g. KWD). Processing currencies are configured on

terminal level.

Transaction amounts on the API level should be submitted in the minor currency unit for the given currency, e.g.:

Amount currencies:

Name	Type	Description
USD	100.33	Should be submitted as 10033 in the amount API field (exponent 2)
EUR	3	Should be submitted as 300 in the amount API field (exponent 2)
JPY	150	Should be submitted as 150 in the amount API field (exponent 0)
KWD	100.333	Should be submitted as 100333 in the amount API field (exponent 3)

Amount limits: Amount has to be provided within limit for listed transaction types and currencies:

Transaction Type	Currency	minimum	maximum
Global limit	All	0.01	1,000,000,000.00
alipay	CNY	0.01	50,000.00
	EUR	0.01	6,529.00
davivienda	USD	0.01	3,000.00
banco de chile	USD	0.01	3,000.00
webpay	USD	0.01	3,000.00
pago facil	USD	0.01	3,000.00
rapi pago	USD	0.01	3,000.00
link	USD	0.01	3,000.00
santander	USD	0.01	3,000.00
aura	USD	0.01	3,000.00
cabal	USD	0.01	3,000.00
nativa	USD	0.01	3,000.00
naranja	USD	0.01	3,000.00
cencosud	USD	0.01	3,000.00
tarjeta shopping	USD	0.01	3,000.00
redpagos	USD	0.01	3,000.00
bcmc	EUR	1,00	1,000,000.00
elo	USD	0.01	3,000.00
oxxo	USD	0.01	3,000.00
bradesco	USD	0.01	3,000.00
cartao mercado livre	USD	0.01	3,000.00
efecty	USD	0.01	3,000.00
boleto	USD	2.50	2,500.00
itau	USD	0.01	3,000.00
multibanco	USD	0.01	99,999.99
banco do brasil	USD	0.01	3,000.00
argencard	USD	0.01	3,000.00
banco de occidente	USD	0.01	3,000.00
bancomer	USD	0.01	3,000.00
giropay	EUR	1.00	1,000,000,000.00
baloto	USD	0.01	3,000.00
eps	EUR	1.00	1,000,000.00
sofort	EUR	1.00	5,000.00

Transaction Type	Currency	minimum	maximum
sdd sale	All	0.10	24,999.99
sct payout	All	0.10	24,999.99
sdd init recurring sale	All	0.10	24,999.99
sdd refund	All	0.10	24,999.99
neosurf	All	0.01	9,999.99
p24	EUR	0.01	15,000.00
rpn payment	All	0.10	100,000.00
rpn payout	All	100.00	1,000,000.00
citadel payin	EUR	0.01	10,000.00
citadel payout	EUR	0.01	10,000.00
idebit payin	CAD	0.01	1,500.00
idebit payout	CAD	0.01	1,500.00
online banking	CNY*	10.00	50,000.00
	THB	10.00	500,000.00
	IDR	10,000.00	50,000,000.00
	MYR	10.00	20,000.00
bank payout	CNY	60.00	49,000.00
	THB	350.00	175,000.00
	IDR	50,000.00	25,000,000.00
	MYR	50.00	20,000.00
wechat	All	10.00	3,000.00
ezeecard payout	EUR	10.00	800.00
paysafecard	EUR	0.01	1,000.00
poli	AUD	0.01	9,999.00
insta debit payin	CAD	0.01	1,500.00
bitpay	USD	1.00	950,000.00
bitpay sale	USD	1.00	950,000.00
bitpay payout	USD	1.00	950,000.00
pse	USD	0.01	3,000.00

`* = Depends on the setup`

Check the ISO 4217 standard for details on currencies and their exponents/minor currency units.

Dynamic Descriptor

Dynamic descriptor functionality is available as part of the gateway. It is enabled on terminal level, so contact the IT Support team attech-support@e-comprocessing.com if you wish to use it.

Currently, the transactions types that support dynamic descriptor parameters are Authorize, Authorize3d, Sale, Sale3d, InitRecurringSale, InitRecurringSale3d and Payout.

WPF payments also support dynamic descriptor.

The currently supported dynamic descriptor parameters are:

Name	Type	Description
merchant_name	string(25)	Needed by merchants/PSPs to change the charge description. Any chars above 25 are truncated. If the merchant name is less than 25 chars, it is right padded with whitespace before sent to the schemes
merchant_city	string(13)	Contains the city of the merchant for card-present merchants and the merchant phone number for CNP merchants. Formatting rules applied as mentioned above
sub_merchant_id	string(15)	Sub-merchant ID assigned by the Payment Facilitator.

If the terminal is configured with dynamic descriptor, but the merchant does not send the dynamic descriptor parameter in question at all or sends whitespace, this defaults the given dynamic descriptor parameter to the static descriptor configured on MID level when submitted to the schemes.

Note also that the dynamic descriptor params section with the properly formatted individual dynamic descriptor params is returned in the payment transaction response on the API if those params have been submitted in the transaction API request beforehand.

Regarding reference-based transactions, since they do not accept any dynamic descriptor params in the request, there is no dynamic descriptor params section in the response as well. Reference-based transactions reuse the dynamic descriptor params of their original transaction.

The sub-merchant ID should be provided by all merchants that are processing under Payment Facilitator. If the terminal does not support dynamic descriptor, a static value can be configured on a merchant level.

Electronic Commerce Indicator

Electronic Commerce Indicator (ECI) is a value that is returned from the Directory Server (Visa, MasterCard, etc.) to indicate the authentication results of your customer's credit card payment on 3D Secure.

Visa/JCB/Diners/American Express/Rupay

ECI Code	Description
05	Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful
06	Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D cardholder not enrolled 2. Card issuing bank is not 3D Secure ready
07	Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction

MasterCard/Maestro

ECI Code	Description
02	Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful
01	Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D Cardholder not enrolled 2. Card issuing bank is not 3D Secure ready
00 (or empty)	Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction

---

Issuer Response Codes

See below a list of issuer response codes with the corresponding messages. Issuer response codes (response code element) are different than the regular gateway codes (code element) - the issuer response code maps to the issuer code while the code is the gateway internal code mapping and part of the API, as described in the Errors section. Transaction responses will return the relevant issuer response code (note that both issuer response code and authorization code are optional in the API responses and will be returned only if the transaction reached the issuer)

Issuer Response Code	Issuer Message
00	Approved or completed successfully
02	Refer to card issuer
03	Invalid merchant
04	Pickup card
05	Do not honour
06	Invalid Transaction for Terminal
07	Honour with ID
08	Time-Out
09	No Original
10	Unable to Reverse
11	Partial Approval
12	Invalid transaction card / issuer / acquirer
13	Invalid amount
14	Invalid card number
17	Invalid Capture date, terminal business date

Issuer Response Code	Issuer Message
19	System Error, Re-enter transaction
20	No From Account
21	No To Account
22	No Checking Account
23	No Saving Account
24	No Credit Account
30	Format error
34	Implausible card data
39	Transaction Not Allowed
41	Pick-up card
42	Special Pickup
43	Hot Card, Pickup if possible
44	Pickup Card
45	Transaction Back Off
51	Not su cient funds
54	Expired card
55	Incorrect PIN, Re-enter
57	Not permitted on card
58	Txn Not Permitted On Term
61	Exceeds amount limit
62	Restricted card
63	MAC Key Error
65	Exceeds frequency limit
66	Exceeds Acquirer Limit
67	Retain Card, no reason specified
68	Response received too late
75	Exceeds PIN Retry
76	Invalid Account
77	Issuer Does Not Participate In The Service
78	Function Not Available
79	Key Validation Error
80	Approval for Purchase Amount Only
81	Unable to Verify PIN
82	Invalid Card Verification Value
83	Not declined, AVS Only
84	Invalid Life Cycle of transaction
85	No Keys To Use
86	K M E Sync Error
87	PIN Key Error
88	MAC sync Error
89	Security Violation
91	Issuer not available
92	Invalid Issuer

Issuer Response Code	Issuer Message
93	Transaction cannot be completed
94	Invalid originator
96	System malfunction
97	No Funds Transfer
98	Duplicate Reversal
99	Duplicate Transaction
N3	Cash Service Not Available
N4	Cash Back Request Exceeds Issuer Limit
N7	CVV2 Failure
R0	Stop Payment Order
R1	Revocation of Authorisation Order
R3	Revocation of all Authorisations Order

Manually Reviewed Transactions

Under certain conditions, transactions can be stopped for manual review by the Risk team. This happens when the appropriate risk rules have been enabled for the merchant in question. Feel free to discuss enabling of manual reviews for transactions with our Risk team. Transactions that are stopped for manual review are returned with status 'pending review' in the API response, together with a detailed message specifying a manual review of this transaction. Note that transactions will be manually reviewed by the Risk team in the next 24 hours. In the process, each transaction will be manually approved or manually declined, and at this point the merchant will receive a notification with the status of the transaction, see Notifications.

Special case for manual reviewing is when the transaction is 3D async, in this case the merchant receives one notification if the transaction is manually declined by the Risk team, and two notifications if the transaction is manually approved. On manual approval, the first notification is sent once the transaction is manually approved and is sent for enrollment check to the MPI provider - the notification will contain status pending asyc together with the redirect url where the consumer needs to be redirected to by the merchant. The second notification is the standard 3D notification, once a consumer has been redirected to the given redirect url, has entered his/her MPI password, and contains the final status of the transaction whether it is approved by the issuer, or declined for invalid 3D password, and so on

The format of the first notification for manual review and following approval is:

```
?transaction_id=82803B4C-70CC-43BD-8B21-FD0395285B40
&unique_id=44177a21403427eb96664a6d7e5d5d48
&transaction_type=sale3d
&terminal_token=394f2ebc3646d3c017fa1e1cbc4a1e20
&status=pending_async
&amount=500
&signature=088e16a1019277b15d58faf0541e11910eb756f6
&eci=06
&redirect_url=http://example.com/redirect_url
```

The second notification is the same as the typical 3D notifications for final statuses after the consumer has performed the 3D workflow.

Partial Approvals

Credit cards that do not have sufficient funds in their account for the full purchase amount may be provided with a partial approval response from the issuer. When a partial approval happens, there will be a flag confirming the partial approval in the response (partial approval set to 'true') and the amount field in the response will contain the actual partially approved amount instead of the requested one in the API request. The cardholder can then choose to use a supplemental payment method to pay the balance and complete the purchase, if so desired. Merchants that accept partial approvals should note that issuers may return a partial approval response on a pre-paid/debit card at any time, and issuers may also respond with a partial approval response amount that is equal to the requested amount.

Have in mind that full/partial refunds or captures need to reference the partially approved initial transaction, you will get a workflow error if trying to capture or refund more than the partially approved amount. So make sure you check for the partial approval flag in the API response for the relevant transaction types, and handle follow-up transaction amounts properly.

With 3-D secure transactions, if a partial approval happened, the partially approved amount will be returned in the async API notification to the merchant. This is because actual communication with the acquirers happen after 3D authentication by the cardholder, in the initial API response the merchant will get the requested amount with the status 'pending async' for the transaction.

Note that partial approval support is disabled by default, feel free to contact our Risk team to enable it.

Preauthorizations

Preauthorizations are used to request Approval for an estimated transaction amount because the final transaction amount will only be known some time later. This type of message is typically sent for transactions such as car rentals, hotel rooms and petrol. The reason for the preauthorization is to authenticate the card and the cardholder and also to check funds availability.

They are similar to the final authorizations, but have longer authorize time-frame and allow amount to be extended *(restricted per card brand)*.

Basic Workflow

- Preauthorization
- Incremental authorize
- Capture
- Full reversal
- Partial reversal

PREAUTHORIZATION

Preauthorization transaction can be submitted via normal Authorize or Authorize3d transaction with additional request param **preauthorization**.

To enable this, please contact tech-support@e-comprocessing.com.

Supported Card brands

VISA

Visa Lodging Preauthorization Request

```
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('TrxID_5e16f73327eb6a53da3f2e11511e0f2f')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('5000')
        ->setCurrency('USD')
        ->setPreauthorization('true')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.AuthorizeRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AuthorizeRequest request = new AuthorizeRequest();

    request.setTransactionId("TrxID_5e16f73327eb6a53da3f2e11511e0f2f");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(5000));
    request.setCurrency("USD");
    request.setPreauthorization("true");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize(
  {
    "transaction_id": "TrxID_5e16f73327eb6a53da3f2e11511e0f2f",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": 5000,
    "currency": "USD",
    "preauthorization": true,
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize</transaction_type>
    <transaction_id>TrxID_5e16f73327eb6a53da3f2e11511e0f2f</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>5000</amount>
    <currency>USD</currency>
    <preauthorization>true</preauthorization>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Successful Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [mode] => live
    [transaction_id] => TrxID_5e16f73327eb6a53da3f2e11511e0f2f
    [unique_id] => 32a23eac81d34cc2da1cbf02f97c7995
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [cvv_result_code] => M
    [authorization_code] => 511890
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:22.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 5000
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[TrxID_5e16f73327eb6a53da3f2e11511e0f2f]>
    <unique_id content=[32a23eac81d34cc2da1cbf02f97c7995]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <cvv_result_code content=[M]>
    <authorization_code content=[511890]>
    <response_code content=[00]>
    <timestamp content=[2021-02-04T15:26:22Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[5000]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "authorize",
    status: "approved",
    mode: "live",
    transaction_id: "TrxID_5e16f73327eb6a53da3f2e11511e0f2f",
    unique_id: "32a23eac81d34cc2da1cbf02f97c7995",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    cvv_result_code: "M",
    authorization_code: "511890",
    response_code: "00",
    timestamp: "2021-02-04T15:26:22Z",
    descriptor: "Descriptor one",
    amount: "5000",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>TrxID_5e16f73327eb6a53da3f2e11511e0f2f</transaction_id>
  <unique_id>32a23eac81d34cc2da1cbf02f97c7995</unique_id>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <cvv_result_code>M</cvv_result_code>
  <authorization_code>511890</authorization_code>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:26:22Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>5000</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Reconcile Visa Preauthorization Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('32a23eac81d34cc2da1cbf02f97c7995');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("32a23eac81d34cc2da1cbf02f97c7995");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "32a23eac81d34cc2da1cbf02f97c7995"
  }
).send()
  .then(success)
  .catch(failure);
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>32a23eac81d34cc2da1cbf02f97c7995</unique_id>
  </reconcile>'
```

Successful Preauthorization Reconciliation Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [authorization_code] => 511890
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 32a23eac81d34cc2da1cbf02f97c7995
    [transaction_id] => TrxID_5e16f73327eb6a53da3f2e11511e0f2f
    [mode] => live
    [timestamp] => 2021-02-04T15:26:22Z
    [descriptor] => Descriptor one
    [amount] => 5000
    [currency] => USD
    [card_brand] => visa
    [card_number] => 420000...0000
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [preauthorization] => true
    [preauthorization_expires_at] => 2021-03-07T15:26:22Z
    [preauthorization_total_amount] => 5000
    [capturable_amount] => 5750
    [captured_amount] => 0
    [reversed_amount] => 0
    [reversible_amount] => 5000
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <authorization_code content=[511890]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[32a23eac81d34cc2da1cbf02f97c7995]>
    <transaction_id content=[TrxID_5e16f73327eb6a53da3f2e11511e0f2f]>
    <mode content=[live]>
    <timestamp content=[2021-02-04T15:26:22Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[5000]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[420000...0000]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <preauthorization content=[true]>
    <preauthorization_expires_at content=[2021-03-07T15:26:22Z]>
    <preauthorization_total_amount content=[5000]>
    <capturable_amount content=[5750]>
    <captured_amount content=[0]>
    <reversed_amount content=[0]>
    <reversible_amount content=[5000]>
]>
```

```
{
    transaction_type: "authorize",
    status: "approved",
    authorization_code: "511890",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "32a23eac81d34cc2da1cbf02f97c7995",
    transaction_id: "TrxID_5e16f73327eb6a53da3f2e11511e0f2f",
    mode: "live",
    timestamp: "2021-02-04T15:26:22Z",
    descriptor: "Descriptor one",
    amount: "5000",
    currency: "USD",
    card_brand: "visa",
    card_number: "420000...0000",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    preauthorization: "true",
    preauthorization_expires_at: "2021-03-07T15:26:22Z",
    preauthorization_total_amount: "5000",
    capturable_amount: "5750",
    captured_amount: "0",
    reversed_amount: "0",
    reversible_amount: "5000",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <authorization_code>511890</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>32a23eac81d34cc2da1cbf02f97c7995</unique_id>
  <transaction_id>TrxID_5e16f73327eb6a53da3f2e11511e0f2f</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-04T15:26:22Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>5000</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>420000...0000</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <preauthorization>true</preauthorization>
  <preauthorization_expires_at>2021-03-07T15:26:22Z</preauthorization_expires_at>
  <preauthorization_total_amount>5000</preauthorization_total_amount>
  <capturable_amount>5750</capturable_amount>
  <captured_amount>0</captured_amount>
  <reversed_amount>0</reversed_amount>
  <reversible_amount>5000</reversible_amount>
</payment_response>
```


- MCC Restriction - **YES**
- Authorization timeframe - **31 days** *(depends on the MCC and merchant region)*
- Authorize timeframe extension - **not supported**
- Capture tolerance - *percent* or *amount*. Navigate to the Capture section to learn more.

MCC	Segment	Authorization timeframe	Amount tolerance
3501-3999, 7011	Lodging	31 days	15%
3351-3500, 7512	Car Rental	31 days	15%
4411	Steamship and Cruise Lines	31 days	15%
7513	Truck Rentals	7 days	15%
7033	Trailer Parks and Campgrounds	7 days	15%
7519	Motor Home and Recreational Vehicle Rentals	7 days	15%
5552	Electric Vehicle Charging	7 days	15%
7523	Parking and Garages	7 days	15%
7394	Equipment, Tool, Furniture and Appliance Rental	7 days	none
7999	Recreation Services	7 days	none
7996	Amusement Parks, Carnivals, Circuses, Fortune Tellers	7 days	none
5599	Miscellaneous Automotive, Aircraft, and Farm Equipment Dealers	7 days	none
4457	Boat Rentals and Leasing	7 days	none
5571	Motorcycle Shops and Dealers	7 days	none
4111	Local and Suburban Commuter, Passenger Transportation, including Ferries	7 days[1]	25 USD[3]
4112	Passenger Railways	7 days[1]	25 USD[3]
4131	Bus Lines	7 days[1]	25 USD[3]
5812	Eating Places and Restaurants	end of approval day[2]	20%
5813	Drinking Places, Bars, Taverns, Cocktail Lounges, Nightclubs, Discotheques	end of approval day[2]	20%
4121	Taxicabs and Limousines (Card-Absent Environment only)	end of approval day[2]	20%

7 days[1] - 7 days *(3 days for US merchant region)*

end of approval day[2] - end of approval day *(in the acquirer's timezone)*

25 USD[3] - a capture with amount up to 25 USD can be requested without a need of additional incremental authorization. Just in case the authorized amount is less than 25 USD *(15 USD for merchants in the US region)*. The respective amount will be exchanged to the transaction currency in case the currency is different than USD.

MASTERCARD

Master Lodging Preauthorization Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('TrxID_0caec995e3b17828470533148f2b1b9c')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('5000')
        ->setCurrency('USD')
        ->setPreauthorization('true')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('5555555555554444')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.AuthorizeRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AuthorizeRequest request = new AuthorizeRequest();

    request.setTransactionId("TrxID_0caec995e3b17828470533148f2b1b9c");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(5000));
    request.setCurrency("USD");
    request.setPreauthorization("true");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("5555555555554444");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize(
  {
    "transaction_id": "TrxID_0caec995e3b17828470533148f2b1b9c",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": 5000,
    "currency": "USD",
    "preauthorization": true,
    "card_holder": "Travis Pastrana",
    "card_number": "5555555555554444",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize</transaction_type>
    <transaction_id>TrxID_0caec995e3b17828470533148f2b1b9c</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>5000</amount>
    <currency>USD</currency>
    <preauthorization>true</preauthorization>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>5555555555554444</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Successful Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [mode] => live
    [transaction_id] => TrxID_0caec995e3b17828470533148f2b1b9c
    [unique_id] => 22690bc21d7b095116bbfda7b0b286b4
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [cvv_result_code] => M
    [authorization_code] => 55214
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-03 15:26:22.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 5000
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[TrxID_0caec995e3b17828470533148f2b1b9c]>
    <unique_id content=[22690bc21d7b095116bbfda7b0b286b4]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <cvv_result_code content=[M]>
    <authorization_code content=[55214]>
    <response_code content=[00]>
    <timestamp content=[2021-02-03T15:26:22Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[5000]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "authorize",
    status: "approved",
    mode: "live",
    transaction_id: "TrxID_0caec995e3b17828470533148f2b1b9c",
    unique_id: "22690bc21d7b095116bbfda7b0b286b4",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    cvv_result_code: "M",
    authorization_code: "55214",
    response_code: "00",
    timestamp: "2021-02-03T15:26:22Z",
    descriptor: "Descriptor one",
    amount: "5000",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize</transaction_type>
    <status>approved</status>
    <mode>live</mode>
    <transaction_id>TrxID_0caec995e3b17828470533148f2b1b9c</transaction_id>
    <unique_id>22690bc21d7b095116bbfda7b0b286b4</unique_id>
    <avs_response_code>5I</avs_response_code>
    <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
    <cvv_result_code>M</cvv_result_code>
    <authorization_code>55214</authorization_code>
    <response_code>00</response_code>
    <timestamp>2021-02-03T15:26:22Z</timestamp>
    <descriptor>Descriptor one</descriptor>
    <amount>5000</amount>
    <currency>USD</currency>
    <sent_to_acquirer>true</sent_to_acquirer>
  </payment_transaction>
```


Reconcile Master Preauthorization Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('22690bc21d7b095116bbfda7b0b286b4');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("22690bc21d7b095116bbfda7b0b286b4");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "22690bc21d7b095116bbfda7b0b286b4"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>22690bc21d7b095116bbfda7b0b286b4</unique_id>
  </reconcile>'
```

Successful Preauthorization Reconciliation Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [authorization_code] => 55214
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 22690bc21d7b095116bbfda7b0b286b4
    [transaction_id] => TrxID_0caec995e3b17828470533148f2b1b9c
    [mode] => live
    [timestamp] => 2021-02-03T15:26:22Z
    [descriptor] => Descriptor one
    [amount] => 5000
    [currency] => USD
    [card_brand] => master
    [card_number] => 555555...4444
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [preauthorization] => true
    [preauthorization_expires_at] => 2021-03-05T15:26:22Z
    [preauthorization_total_amount] => 5000
    [capturable_amount] => 5000
    [captured_amount] => 0
    [reversed_amount] => 0
    [reversible_amount] => 5000
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <authorization_code content=[55214]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[22690bc21d7b095116bbfda7b0b286b4]>
    <transaction_id content=[TrxID_0caec995e3b17828470533148f2b1b9c]>
    <mode content=[live]>
    <timestamp content=[2021-02-03T15:26:22Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[5000]>
    <currency content=[USD]>
    <card_brand content=[master]>
    <card_number content=[555555...4444]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <preauthorization content=[true]>
    <preauthorization_expires_at content=[2021-03-05T15:26:22Z]>
    <preauthorization_total_amount content=[5000]>
    <capturable_amount content=[5000]>
    <captured_amount content=[0]>
    <reversed_amount content=[0]>
    <reversible_amount content=[5000]>
]>
```

```
{
    transaction_type: "authorize",
    status: "approved",
    authorization_code: "55214",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "22690bc21d7b095116bbfda7b0b286b4",
    transaction_id: "TrxID_0caec995e3b17828470533148f2b1b9c",
    mode: "live",
    timestamp: "2021-02-03T15:26:22Z",
    descriptor: "Descriptor one",
    amount: "5000",
    currency: "USD",
    card_brand: "master",
    card_number: "555555...4444",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    preauthorization: "true",
    preauthorization_expires_at: "2021-03-05T15:26:22Z",
    preauthorization_total_amount: "5000",
    capturable_amount: "5000",
    captured_amount: "0",
    reversed_amount: "0",
    reversible_amount: "5000",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <authorization_code>55214</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>22690bc21d7b095116bbfda7b0b286b4</unique_id>
  <transaction_id>TrxID_0caec995e3b17828470533148f2b1b9c</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-03T15:26:22Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>5000</amount>
  <currency>USD</currency>
  <card_brand>master</card_brand>
  <card_number>555555...4444</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <preauthorization>true</preauthorization>
  <preauthorization_expires_at>2021-03-05T15:26:22Z</preauthorization_expires_at>
  <preauthorization_total_amount>5000</preauthorization_total_amount>
  <capturable_amount>5000</capturable_amount>
  <captured_amount>0</captured_amount>
  <reversed_amount>0</reversed_amount>
  <reversible_amount>5000</reversible_amount>
</payment_response>
```


- MCC Restriction - **NO**
- Authorize timeframe - **30 days**
- Authorize timeframe extension - **supported via Incremental authorize**
- Capture tolerance - **YES**, but only for the MCCs below. Navigate to theCapture section to learn more.

MCC	Segment	Authorization timeframe	Amount tolerance
5812	Eating Places, Restaurants	30 days	20%
5814	Fast Food Restaurants	30 days	20%

MAESTRO

Intl Maestro Lodging Preauthorization Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('TrxID_bec89fe5d6e365caaa7300ec8bc93708')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('5000')
        ->setCurrency('USD')
        ->setPreauthorization('true')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('6759411100000008')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.AuthorizeRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AuthorizeRequest request = new AuthorizeRequest();

    request.setTransactionId("TrxID_bec89fe5d6e365caaa7300ec8bc93708");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(5000));
    request.setCurrency("USD");
    request.setPreauthorization("true");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("6759411100000008");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize(
  {
    "transaction_id": "TrxID_bec89fe5d6e365caaa7300ec8bc93708",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": 5000,
    "currency": "USD",
    "preauthorization": true,
    "card_holder": "Travis Pastrana",
    "card_number": "6759411100000008",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize</transaction_type>
    <transaction_id>TrxID_bec89fe5d6e365caaa7300ec8bc93708</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>5000</amount>
    <currency>USD</currency>
    <preauthorization>true</preauthorization>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>6759411100000008</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
  </payment_transaction>'
```

Successful Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [mode] => live
    [transaction_id] => TrxID_bec89fe5d6e365caaa7300ec8bc93708
    [unique_id] => 4ba621ab5e597016d40473e224f68fb0
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [cvv_result_code] => M
    [authorization_code] => 964091
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-02 15:26:22.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 5000
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[TrxID_bec89fe5d6e365caaa7300ec8bc93708]>
    <unique_id content=[4ba621ab5e597016d40473e224f68fb0]>
    <avs_response_code content=[5I]>
    <avs_response_text content=[Response provided by issuer processor; Address information not verified]>
    <cvv_result_code content=[M]>
    <authorization_code content=[964091]>
    <response_code content=[00]>
    <timestamp content=[2021-02-02T15:26:22Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[5000]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "authorize",
    status: "approved",
    mode: "live",
    transaction_id: "TrxID_bec89fe5d6e365caaa7300ec8bc93708",
    unique_id: "4ba621ab5e597016d40473e224f68fb0",
    avs_response_code: "5I",
    avs_response_text: "Response provided by issuer processor; Address information not verified",
    cvv_result_code: "M",
    authorization_code: "964091",
    response_code: "00",
    timestamp: "2021-02-02T15:26:22Z",
    descriptor: "Descriptor one",
    amount: "5000",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize</transaction_type>
    <status>approved</status>
    <mode>live</mode>
    <transaction_id>TrxID_bec89fe5d6e365caaa7300ec8bc93708</transaction_id>
    <unique_id>4ba621ab5e597016d40473e224f68fb0</unique_id>
    <avs_response_code>5I</avs_response_code>
    <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
    <cvv_result_code>M</cvv_result_code>
    <authorization_code>964091</authorization_code>
    <response_code>00</response_code>
    <timestamp>2021-02-02T15:26:22Z</timestamp>
    <descriptor>Descriptor one</descriptor>
    <amount>5000</amount>
    <currency>USD</currency>
    <sent_to_acquirer>true</sent_to_acquirer>
  </payment_transaction>
```


Reconcile Intl Maestro Preauthorization Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('4ba621ab5e597016d40473e224f68fb0');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("4ba621ab5e597016d40473e224f68fb0");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "4ba621ab5e597016d40473e224f68fb0"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>4ba621ab5e597016d40473e224f68fb0</unique_id>
  </reconcile>'
```

Successful Preauthorization Reconciliation Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [authorization_code] => 964091
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 4ba621ab5e597016d40473e224f68fb0
    [transaction_id] => TrxID_bec89fe5d6e365caaa7300ec8bc93708
    [mode] => live
    [timestamp] => 2021-02-02T15:26:22Z
    [descriptor] => Descriptor one
    [amount] => 5000
    [currency] => USD
    [card_brand] => Intl Maestro
    [card_number] => 675941...0008
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [preauthorization] => true
    [preauthorization_expires_at] => 2021-02-09T15:26:22Z
    [preauthorization_total_amount] => 5000
    [capturable_amount] => 5000
    [captured_amount] => 0
    [reversed_amount] => 0
    [reversible_amount] => 5000
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <authorization_code content=[964091]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[4ba621ab5e597016d40473e224f68fb0]>
    <transaction_id content=[TrxID_bec89fe5d6e365caaa7300ec8bc93708]>
    <mode content=[live]>
    <timestamp content=[2021-02-02T15:26:22Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[5000]>
    <currency content=[USD]>
    <card_brand content=[Intl Maestro]>
    <card_number content=[675941...0008]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <preauthorization content=[true]>
    <preauthorization_expires_at content=[2021-02-09T15:26:22Z]>
    <preauthorization_total_amount content=[5000]>
    <capturable_amount content=[5000]>
    <captured_amount content=[0]>
    <reversed_amount content=[0]>
    <reversible_amount content=[5000]>
]>
```

```
{
    transaction_type: "authorize",
    status: "approved",
    authorization_code: "964091",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "4ba621ab5e597016d40473e224f68fb0",
    transaction_id: "TrxID_bec89fe5d6e365caaa7300ec8bc93708",
    mode: "live",
    timestamp: "2021-02-02T15:26:22Z",
    descriptor: "Descriptor one",
    amount: "5000",
    currency: "USD",
    card_brand: "Intl Maestro",
    card_number: "675941...0008",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    preauthorization: "true",
    preauthorization_expires_at: "2021-02-09T15:26:22Z",
    preauthorization_total_amount: "5000",
    capturable_amount: "5000",
    captured_amount: "0",
    reversed_amount: "0",
    reversible_amount: "5000",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <authorization_code>964091</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>4ba621ab5e597016d40473e224f68fb0</unique_id>
  <transaction_id>TrxID_bec89fe5d6e365caaa7300ec8bc93708</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-02T15:26:22Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>5000</amount>
  <currency>USD</currency>
  <card_brand>Intl Maestro</card_brand>
  <card_number>675941...0008</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <preauthorization>true</preauthorization>
  <preauthorization_expires_at>2021-02-09T15:26:22Z</preauthorization_expires_at>
  <preauthorization_total_amount>5000</preauthorization_total_amount>
  <capturable_amount>5000</capturable_amount>
  <captured_amount>0</captured_amount>
  <reversed_amount>0</reversed_amount>
  <reversible_amount>5000</reversible_amount>
</payment_response>
```


- MCC Restriction - **NO**
- Authorize timeframe - **7 days**
- Authorize timeframe extension - **supported via Incremental authorize**
- Capture tolerance - **YES**, but only for the MCCs below. Navigate to theCapture section to learn more.

MCC	Segment	Authorization timeframe	Amount tolerance
5812	Eating Places, Restaurants	7 days	20%
5814	Fast Food Restaurants	7 days	20%

Reconcile the preauthorization to retrieve the Preauthorization specifics:

- Preauthorization expiration
- Total preauthorized amount
- Capturable amount
- Captured amount

INCREMENTAL AUTHORIZE

Incremental authorizations are used in preauthorization workflow to:

- extend the preauthorization amount
- extend the preauthorization time-frame

> Incremental authorizations are non-3DS, because they only refer to the Preauthorization transaction. They cannot be voided / refunded etc, can only modify/extend the related preauthorization.

An incremental authorization transaction can be submitted in case:

- Preauthorization is approved and preauthorization time-frame is not expired
- Preauthorization has not been captured

> A Reconciliation could be performed to find out when a particular preauthorization is about to expire

Extend Preauthorization Timeframe & Amount

Mastercard Incremental Authorization Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Preauthorization\IncrementalAuthorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('TrxID_f9387c386bbf41b7908c8fe291bd42bf')
        ->setUsage('20469237 extend hotel rezervation')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('1000')
        ->setReferenceId('22690bc21d7b095116bbfda7b0b286b4');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>incremental_authorize</transaction_type>
    <transaction_id>TrxID_f9387c386bbf41b7908c8fe291bd42bf</transaction_id>
    <usage>20469237 extend hotel rezervation</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>1000</amount>
    <reference_id>22690bc21d7b095116bbfda7b0b286b4</reference_id>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **incremental_authorize**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer >= 0	Topup amount in minor currency unit, see Currency and Amount Handling for details
reference_id	required	string(32)	Unique id of the corresponding preauthorization transaction

`required* = conditionally required`

> Incremental authorize with **zero** amount is allowed only for Mastercard and Maestro transactions. It will extend only the preauthorization timeframe, but not the preauthorized amount.

Successful Response

```
stdClass Object
(
    [transaction_type] => incremental_authorize
    [status] => approved
    [mode] => live
    [transaction_id] => TrxID_f9387c386bbf41b7908c8fe291bd42bf
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [avs_response_code] => 5I
    [avs_response_text] => Response provided by issuer processor; Address information not verified
    [authorization_code] => 485335
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:24.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 1000
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>incremental_authorize</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>TrxID_f9387c386bbf41b7908c8fe291bd42bf</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <avs_response_code>5I</avs_response_code>
  <avs_response_text>Response provided by issuer processor; Address information not verified</avs_response_text>
  <authorization_code>485335</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <timestamp>2021-02-04T15:26:24Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>1000</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => incremental_authorize
    [status] => error
    [mode] => live
    [transaction_id] => TrxID_f9387c386bbf41b7908c8fe291bd42bf
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 400
    [technical_message] => Preauthorization has been captured, no further incremental authorizations allowed
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:24.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 1000
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>incremental_authorize</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>TrxID_f9387c386bbf41b7908c8fe291bd42bf</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>400</code>
  <technical_message>Preauthorization has been captured, no further incremental authorizations allowed</technical_message>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:24Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>1000</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
dynamic_descriptor_params	section	Optional, returned only if dynamic desc params are submitted on the API. Note here that the formatted dyn desc params are returned - as they would be submitted to the schemes for settlement.

Example Xml For Extending The Time Frame Only

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Preauthorization\IncrementalAuthorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('TrxID_f9387c386bbf41b7908c8fe291bd42bf')
        ->setUsage('204692378 extend the preauthorization validity timeframe')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('0')
        ->setReferenceId('32a23eac81d34cc2da1cbf02f97c7995');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>incremental_authorize</transaction_type>
    <transaction_id>TrxID_f9387c386bbf41b7908c8fe291bd42bf</transaction_id>
    <usage>204692378 extend the preauthorization validity timeframe</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>0</amount>
    <reference_id>32a23eac81d34cc2da1cbf02f97c7995</reference_id>
  </payment_transaction>'
```

Error Response

```
stdClass Object
(
    [transaction_type] => incremental_authorize
    [status] => error
    [mode] => live
    [transaction_id] => TrxID_f9387c386bbf41b7908c8fe291bd42bf
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 400
    [technical_message] => Incremental authorizations with no financial impact are currently not supported by card brand
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:24.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 0
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>incremental_authorize</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>TrxID_f9387c386bbf41b7908c8fe291bd42bf</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>400</code>
  <technical_message>Incremental authorizations with no financial impact are currently not supported by card brand</technical_message>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:24Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>0</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Reconcile Preauthorization By Unique Id Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('22690bc21d7b095116bbfda7b0b286b4');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("22690bc21d7b095116bbfda7b0b286b4");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "22690bc21d7b095116bbfda7b0b286b4"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>22690bc21d7b095116bbfda7b0b286b4</unique_id>
  </reconcile>'
```

Preauthorization time-frame will be extended for Mastercard & Maestro transactions, but not for VISA

Successful Preauthorization Reconciliation Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [authorization_code] => 485335
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 22690bc21d7b095116bbfda7b0b286b4
    [transaction_id] => TrxID_f9387c386bbf41b7908c8fe291bd42bf
    [mode] => live
    [timestamp] => 2021-02-04T15:26:24Z
    [descriptor] => Descriptor one
    [amount] => 5000
    [currency] => USD
    [card_brand] => master
    [card_number] => 555555...4444
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [preauthorization] => true
    [preauthorization_expires_at] => 2021-04-04T15:26:22Z
    [preauthorization_total_amount] => 6000
    [capturable_amount] => 6000
    [captured_amount] => 0
)
```

```xml
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <authorization_code content=[485335]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[22690bc21d7b095116bbfda7b0b286b4]>
    <transaction_id content=[TrxID_f9387c386bbf41b7908c8fe291bd42bf]>
    <mode content=[live]>
    <timestamp content=[2021-02-04T15:26:24Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[5000]>
    <currency content=[USD]>
    <card_brand content=[master]>
    <card_number content=[555555...4444]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <preauthorization content=[true]>
    <preauthorization_expires_at content=[2021-04-04T15:26:22Z]>
    <preauthorization_total_amount content=[6000]>
    <capturable_amount content=[6000]>
    <captured_amount content=[0]>
]>
```

```json
{
    transaction_type: "authorize",
    status: "approved",
    authorization_code: "485335",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "22690bc21d7b095116bbfda7b0b286b4",
    transaction_id: "TrxID_f9387c386bbf41b7908c8fe291bd42bf",
    mode: "live",
    timestamp: "2021-02-04T15:26:24Z",
    descriptor: "Descriptor one",
    amount: "5000",
    currency: "USD",
    card_brand: "master",
    card_number: "555555...4444",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    preauthorization: "true",
    preauthorization_expires_at: "2021-04-04T15:26:22Z",
    preauthorization_total_amount: "6000",
    capturable_amount: "6000",
    captured_amount: "0",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <authorization_code>485335</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>22690bc21d7b095116bbfda7b0b286b4</unique_id>
  <transaction_id>TrxID_f9387c386bbf41b7908c8fe291bd42bf</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-04T15:26:24Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>5000</amount>
  <currency>USD</currency>
  <card_brand>master</card_brand>
  <card_number>555555...4444</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <preauthorization>true</preauthorization>
  <preauthorization_expires_at>2021-04-04T15:26:22Z</preauthorization_expires_at>
  <preauthorization_total_amount>6000</preauthorization_total_amount>
  <capturable_amount>6000</capturable_amount>
  <captured_amount>0</captured_amount>
</payment_response>
```


CAPTURE

Preauthorizations can be captured using the standard Capture transaction with the correct `reference_id` of the Preauthorization.

> A preauthorization can be captured only once. It can be a full & partial capture, but not multiple partial capture. In case of partial capture, the amount left needs to be reversed /

returned first to the consumer using Partial Reversal transaction.

The capturable amount can be greater than the total authorized amount (only for VISA), check Preauthorization section for more info. The amount tolerance is supported only for VISA transactions, can be defined per percent or amount.

An additional incremental authorization will be necessary when the requested capture amount is greater than:

- the total authorized amount including the calculated amount tolerance (% of the total authorized amount)
- the predefined amount tolerance in value exchanged to the appropriate currency (check the amount tolerance mer MCC in the Preauthorization section)

Multiple partial captures are not allowed for both supported card brands

Reconcile Visa Preauthorization Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('32a23eac81d34cc2da1cbf02f97c7995');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("32a23eac81d34cc2da1cbf02f97c7995");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "32a23eac81d34cc2da1cbf02f97c7995"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>32a23eac81d34cc2da1cbf02f97c7995</unique_id>
  </reconcile>'
```

Successful Preauthorization Reconciliation Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 32a23eac81d34cc2da1cbf02f97c7995
    [transaction_id] => 119643250547501c79d8295
    [mode] => live
    [timestamp] => 2021-02-04T15:26:22Z
    [descriptor] => Descriptor one
    [amount] => 3000
    [currency] => USD
    [card_brand] => visa
    [card_number] => 420000...0000
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [preauthorization] => true
    [preauthorization_expires_at] => 2021-03-07T15:26:22Z
    [preauthorization_total_amount] => 5000
    [capturable_amount] => 5750
    [captured_amount] => 0
    [reversed_amount] => 0
    [reversible_amount] => 5000
)
```

```xml
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[32a23eac81d34cc2da1cbf02f97c7995]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <mode content=[live]>
    <timestamp content=[2021-02-04T15:26:22Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[3000]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[420000...0000]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <preauthorization content=[true]>
    <preauthorization_expires_at content=[2021-03-07T15:26:22Z]>
    <preauthorization_total_amount content=[5000]>
    <capturable_amount content=[5750]>
    <captured_amount content=[0]>
    <reversed_amount content=[0]>
    <reversible_amount content=[5000]>
]>
```

```json
{
    transaction_type: "authorize",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "32a23eac81d34cc2da1cbf02f97c7995",
    transaction_id: "1196432505475 01c79d8295",
    mode: "live",
    timestamp: "2021-02-04T15:26:22Z",
    descriptor: "Descriptor one",
    amount: "3000",
    currency: "USD",
    card_brand: "visa",
    card_number: "420000...0000",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    preauthorization: "true",
    preauthorization_expires_at: "2021-03-07T15:26:22Z",
    preauthorization_total_amount: "5000",
    capturable_amount: "5750",
    captured_amount: "0",
    reversed_amount: "0",
    reversible_amount: "5000",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>32a23eac81d34cc2da1cbf02f97c7995</unique_id>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-04T15:26:22Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>3000</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>420000...0000</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <preauthorization>true</preauthorization>
  <preauthorization_expires_at>2021-03-07T15:26:22Z</preauthorization_expires_at>
  <preauthorization_total_amount>5000</preauthorization_total_amount>
  <capturable_amount>5750</capturable_amount>
  <captured_amount>0</captured_amount>
  <reversed_amount>0</reversed_amount>
  <reversible_amount>5000</reversible_amount>
</payment_response>
```

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Capture');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('Check out from the Hotel')
        ->setRemoteIp('245.253.2.12')
        ->setReferenceId('43672')
        ->setAmount('5500')
        ->setCurrency('USD');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.CaptureRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    CaptureRequest request = new CaptureRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("Check out from the Hotel");
    request.setRemoteIp("245.253.2.12");
    request.setReferenceId("43672");
    request.setAmount(new BigDecimal(5500));
    request.setCurrency("USD");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.capture(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "Check out from the Hotel",
    "remote_ip": "245.253.2.12",
    "reference_id": "43672",
    "amount": 5500,
    "currency": "USD"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>capture</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>Check out from the Hotel</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <reference_id>43672</reference_id>
    <amount>5500</amount>
    <currency>USD</currency>
  </payment_transaction>'
```

Successful Response

```
stdClass Object
(
    [transaction_type] => capture
    [status] => approved
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [authorization_code] => 345678
    [response_code] => 00
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:24.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 5500
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[capture]>
    <status content=[approved]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <authorization_code content=[345678]>
    <response_code content=[00]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <timestamp content=[2021-02-04T15:26:24Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[5500]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "capture",
    status: "approved",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    authorization_code: "345678",
    response_code: "00",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    timestamp: "2021-02-04T15:26:24Z",
    descriptor: "Descriptor one",
    amount: "5500",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>capture</transaction_type>
  <status>approved</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <authorization_code>345678</authorization_code>
  <response_code>00</response_code>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <timestamp>2021-02-04T15:26:24Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>5500</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```


Error Response


```
stdClass Object
(
    [transaction_type] => capture
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 420
    [technical_message] => partial reversal is required first for the rest amount
    [message] => Transaction declined.
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:24.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 4000
    [currency] => USD
    [sent_to_acquirer] => false
)
```



```
<payment_response content=[
    <transaction_type content=[capture]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[420]>
    <technical_message content=[partial reversal is required first for the rest amount]>
    <message content=[Transaction declined.]>
    <timestamp content=[2021-02-04T15:26:24Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[4000]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```



```
{
    transaction_type: "capture",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "420",
    technical_message: "partial reversal is required first for the rest amount",
    message: "Transaction declined.",
    timestamp: "2021-02-04T15:26:24Z",
    descriptor: "Descriptor one",
    amount: "4000",
    currency: "USD",
    sent_to_acquirer: "false",
}
```



```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>capture</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>420</code>
  <technical_message>partial reversal is required first for the rest amount</technical_message>
  <message>Transaction declined.</message>
  <timestamp>2021-02-04T15:26:24Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>4000</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

Reconcile Visa Preauthorization Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('32a23eac81d34cc2da1cbf02f97c7995');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("32a23eac81d34cc2da1cbf02f97c7995");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "32a23eac81d34cc2da1cbf02f97c7995"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>32a23eac81d34cc2da1cbf02f97c7995</unique_id>
  </reconcile>'
```

Successful Preauthorization Reconciliation Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 32a23eac81d34cc2da1cbf02f97c7995
    [transaction_id] => 119643250547501c79d8295
    [mode] => live
    [timestamp] => 2021-02-04T15:26:22Z
    [descriptor] => Descriptor one
    [amount] => 3000
    [currency] => USD
    [card_brand] => visa
    [card_number] => 420000...0000
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [preauthorization] => true
    [preauthorization_expires_at] => 2021-03-07T15:26:22Z
    [preauthorization_total_amount] => 5000
    [capturable_amount] => 0
    [captured_amount] => 5500
    [reversed_amount] => 0
    [reversible_amount] => 0
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[32a23eac81d34cc2da1cbf02f97c7995]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[live]>
    <timestamp content=[2021-02-04T15:26:22Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[3000]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[420000...0000]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <preauthorization content=[true]>
    <preauthorization_expires_at content=[2021-03-07T15:26:22Z]>
    <preauthorization_total_amount content=[5000]>
    <capturable_amount content=[0]>
    <captured_amount content=[5500]>
    <reversed_amount content=[0]>
    <reversible_amount content=[0]>
]>
```

```
{
    transaction_type: "authorize",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "32a23eac81d34cc2da1cbf02f97c7995",
    transaction_id: "119643250547501c79d8295",
    mode: "live",
    timestamp: "2021-02-04T15:26:22Z",
    descriptor: "Descriptor one",
    amount: "3000",
    currency: "USD",
    card_brand: "visa",
    card_number: "420000...0000",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    preauthorization: "true",
    preauthorization_expires_at: "2021-03-07T15:26:22Z",
    preauthorization_total_amount: "5000",
    capturable_amount: "0",
    captured_amount: "5500",
    reversed_amount: "0",
    reversible_amount: "0",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>32a23eac81d34cc2da1cbf02f97c7995</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-04T15:26:22Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>3000</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>420000...0000</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <preauthorization>true</preauthorization>
  <preauthorization_expires_at>2021-03-07T15:26:22Z</preauthorization_expires_at>
  <preauthorization_total_amount>5000</preauthorization_total_amount>
  <capturable_amount>0</capturable_amount>
  <captured_amount>5500</captured_amount>
  <reversed_amount>0</reversed_amount>
  <reversible_amount>0</reversible_amount>
</payment_response>
```


FULL REVERSAL

Full reversal of a preauthorization can be submitted using the standardVoid transaction.

> If a preauthorization has not been captured/cleared, the merchant must ensure to submit a full reversal not later than 24 hours after the preauthorization has expired, otherwise a full reversal will be automatically performed by Genesis.

> A preauthorization can be fully reversed via the standardVoid transaction only if it has not been captured or partially reversed viaPartial Reversal transaction.

Reconcile request can be used to determine when the preauthorization is about to expire.

Reconcile Master Preauthorization Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('22690bc21d7b095116bbfda7b0b286b4');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("22690bc21d7b095116bbfda7b0b286b4");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "22690bc21d7b095116bbfda7b0b286b4"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>22690bc21d7b095116bbfda7b0b286b4</unique_id>
  </reconcile>'
```

Successful Preauthorization Reconciliation Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 22690bc21d7b095116bbfda7b0b286b4
    [transaction_id] => 119643250547501c79d8295
    [mode] => live
    [timestamp] => 2021-02-03T15:26:22Z
    [descriptor] => Descriptor one
    [amount] => 3000
    [currency] => USD
    [card_brand] => master
    [card_number] => 555555...4444
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [preauthorization] => true
    [preauthorization_expires_at] => 2021-03-05T15:26:22Z
    [preauthorization_total_amount] => 5000
    [capturable_amount] => 5000
    [captured_amount] => 0
    [reversed_amount] => 0
    [reversible_amount] => 5000
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[22690bc21d7b095116bbfda7b0b286b4]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[live]>
    <timestamp content=[2021-02-03T15:26:22Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[3000]>
    <currency content=[USD]>
    <card_brand content=[master]>
    <card_number content=[555555...4444]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <preauthorization content=[true]>
    <preauthorization_expires_at content=[2021-03-05T15:26:22Z]>
    <preauthorization_total_amount content=[5000]>
    <capturable_amount content=[5000]>
    <captured_amount content=[0]>
    <reversed_amount content=[0]>
    <reversible_amount content=[5000]>
]>
```


```
{
    transaction_type: "authorize",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "22690bc21d7b095116bbfda7b0b286b4",
    transaction_id: "119643250547501c79d8295",
    mode: "live",
    timestamp: "2021-02-03T15:26:22Z",
    descriptor: "Descriptor one",
    amount: "3000",
    currency: "USD",
    card_brand: "master",
    card_number: "555555...4444",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    preauthorization: "true",
    preauthorization_expires_at: "2021-03-05T15:26:22Z",
    preauthorization_total_amount: "5000",
    capturable_amount: "5000",
    captured_amount: "0",
    reversed_amount: "0",
    reversible_amount: "5000",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>22690bc21d7b095116bbfda7b0b286b4</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-03T15:26:22Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>3000</amount>
  <currency>USD</currency>
  <card_brand>master</card_brand>
  <card_number>555555...4444</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <preauthorization>true</preauthorization>
  <preauthorization_expires_at>2021-03-05T15:26:22Z</preauthorization_expires_at>
  <preauthorization_total_amount>5000</preauthorization_total_amount>
  <capturable_amount>5000</capturable_amount>
  <captured_amount>0</captured_amount>
  <reversed_amount>0</reversed_amount>
  <reversible_amount>5000</reversible_amount>
</payment_response>
```


PARTIAL REVERSAL

Partial reversal transactions are used in the preauthorization workflow to release a part of the total authorized amount. A transaction of this type should refer to the preauthorization directly.

> The partial reversals can be submitted no later than 24 hours after the preauthorization is about to expire.

> Reconcile could be performed to retrieve the reversible amount of a preauthorization. If a VISA Preauthorization has already been captured with a higher amount than the total preauthorized (benefiting from VISA amount tolerance), the reversible amount will be **0**. Otherwise, **reversible amount** = **preauthorization total amount** - **captured amount** - **reversed amount**.

Extend Preauthorization Timeframe & Amount

Partial Reversal Request Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Preauthorization\PartialReversal');
    $request = $genesis->request();

    $request
        ->setTransactionId('TrxID_4769031d4fd3d9e01461123f29378994')
        ->setUsage('40208 hotel reservation changed')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('500')
        ->setReferenceId('22690bc21d7b095116bbfda7b0b286b4');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>partial_reversal</transaction_type>
   <transaction_id>TrxID_4769031d4fd3d9e01461123f29378994</transaction_id>
   <usage>40208 hotel reservation changed</usage>
   <remote_ip>245.253.2.12</remote_ip>
   <amount>500</amount>
   <reference_id>22690bc21d7b095116bbfda7b0b286b4</reference_id>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_type	required	string(255)	The transaction type: **partial_reversal**
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	required*	string(255)	Description of the transaction for later use.
remote_ip	required*	IPv4 or IPv6 address	IPv4 or IPv6 address of customer
amount	required	integer > 0	The amount to be reversed in minor currency unit, seeCurrency and Amount Handling for details.
reference_id	required	string(32)	Unique id of the corresponding preauthorization transaction

`required* = conditionally required`

Successful Response

```
stdClass Object
(
    [transaction_type] => partial_reversal
    [status] => approved
    [authorization_code] => 629324
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [transaction_id] => TrxID_4769031d4fd3d9e01461123f29378994
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:25.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [mode] => live
    [descriptor] => Descriptor one
    [amount] => 500
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <transaction_type>partial_reversal</transaction_type>
   <status>approved</status>
   <authorization_code>629324</authorization_code>
   <retrieval_reference_number>016813015184</retrieval_reference_number>
   <response_code>00</response_code>
   <transaction_id>TrxID_4769031d4fd3d9e01461123f29378994</transaction_id>
   <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
   <timestamp>2021-02-04T15:26:25Z</timestamp>
   <mode>live</mode>
   <descriptor>Descriptor one</descriptor>
   <amount>500</amount>
   <currency>USD</currency>
   <sent_to_acquirer>true</sent_to_acquirer>
 </payment_transaction>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states

Parameter	Type	Description
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
gaming	'true'	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995, contact tech support for more details.
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"

Error Response

```
stdClass Object
(
    [transaction_type] => partial_reversal
    [status] => error
    [mode] => live
    [transaction_id] => TrxID_4769031d4fd3d9e01461123f29378994
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 410
    [technical_message] => No approved preauthorization reference transaction found
    [message] => Something went wrong, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:25.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 500
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>partial_reversal</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>TrxID_4769031d4fd3d9e01461123f29378994</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>410</code>
  <technical_message>No approved preauthorization reference transaction found</technical_message>
  <message>Something went wrong, please contact support!</message>
  <timestamp>2021-02-04T15:26:25Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>500</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```


Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
transaction_id	string(255)	Unique transaction id defined by merchant
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08-30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
sent_to_acquirer	string(255)	"true" or "false"

Required vs Optional API params

There are some API params which can be configured as either optional or required on the terminal level. Contact the IT Support team at tech-support@e-comprocessing.com if you wish to disable or enable some API params based on your business model and integration type. Note also that if all the billing address params are configured as optional, then the whole billing address XML tag can be dismissed and not sent in the API requests.

Name	Type	Description
customer_email	email address	By default, customer email is a required API param
customer_phone	string(32)	By default, customer phone is an optional API param
remote_ip	string(40)	By default, customer IP is a required API param
first_name	string(255)	By default, customer first name is a required API param
last_name	string(255)	By default, customer last name is a required API param
address1	string(255)	By default, primary address is a required API param. Cannot be configured as optional for account verification transaction type
address2	string(255)	By default, secondary address is an optional API param
city	string(255)	By default, city is a required API param. Cannot be config- ured as optional for account verification transaction type
zip_code	string	By default, zip code is a required API param. Cannot be con- figured as optional for account verification transaction type
state	string(2)	By default, state is an optional API param (unless country is US or CA)
country	string(2)	By default, country code is a required API param
usage	string(255)	By default, usage will be configured as a required API param for SDD and P24, optional for the rest

Transaction States

Transactions will have one of the following states. These will be returned by transaction responses, reconcile responses and will be shown in the browser interface

Status	Description
approved	Transaction was approved by the schemes and is successful.
declined	Transaction was declined by the schemes or risk management.
pending_async	An asynchronous transaction (3-D secure payment) has been initiated and is waiting for user input. Updates of this state will be sent to the notification url specified in request.
pending_hold	An asynchronous transaction has been finalized by user but is waiting final update from provider.
pending	The outcome of the transaction could not be determined, e.g. at a timeout situation. Transaction state will eventually change, so make a reconcile after a certain time frame.
error	An error has occurred while negotiating with the schemes.

Status	Description
refunded	Once an approved transaction is refunded the state changes to refunded.
chargebacked	Once an approved transaction is chargebacked - the state changes to changebacked. Chargeback is the state of rejecting an accepted transaction (with funds transferred) by the cardholder or the issuer
voided	Transaction was authorized, but later the merchant canceled it.
chargeback_reversed	Once a chargebacked transaction is charged, the state changes to chargeback reversed. Chargeback has been canceled.
represented	Once a chargebacked transaction is charged, the state changes to represented. Chargeback has been canceled.
second_chargebacked	Once a chargeback_reversed/represented transaction is chargebacked the state changes to second chargebacked.
pending_review	Transaction on hold, a manual review will be done
partially_reversed	Relevant only for preauthorization transactions. Once partial amount (less than the full preauthorized amount) is returned to the customer, the transaction becomes partially reversed.

Supported Card Brands

Card Brands are specific per acquirer. If you want to use a specific card brand you can contactech-support@e-comprocessing.com.

Supported card brands
Visa
Master
Intl Maestro
Discover
Diners
AMEX
JCB
RuPay
Elo
Aura
Hipercard

Document ID Parameter

Document ID is consumer personal identification. It is different for every country and is described more specifically in the table below. Document ID is required for some of the acquirers, please contact the IT Support team at tech-support@e-comprocessing.com for more information.

Country	Name	Type	Description
Argentina	document_id	string(255)	Consumer's Argentinian Identification Number(DNI or CUIT). Must be string between 7 to 9, or 11 digits.
Brazil	document_id	string(255)	Consumer's Brazilian Identification Number(CPF or CNPJ). Must be string between 11 and 14 digits and to have full cpf validation. Example: 76484475687
Chile	document_id	string(255)	Consumer's Chilean Identification Number(CI/RUT). Must be string between 8 to 9 digits.
Colombia	document_id	string(255)	Consumer's Colombian Identification Number(CC). Must be string between 6 to 10 digits.
India	document_id	string(255)	Consumer's Indian PAN. Must be string with 10 alphanumeric letters. 5 letters, followed by 4 numbers, followed by 1 letter or number. Example: ABCDE1234F
Mexico	document_id	string(255)	Consumer's Mexican Identification Number(CURP). Must be string between 10 and 18 digits.
Paraguay	document_id	string(255)	Consumer's Paraguayan Identification Number(CI). Must be string between 5 and 20 digits.
Peru	document_id	string(255)	Consumer's Peruvian Identification Number(DNI). Must be string between 8 and 9 digits.
Turkey	document_id	string(255)	Consumer's Turkish Identification Number(T.C. Kimlik No.). Must be string between 5 and 20 digits.
Uruguay	document_id	string(255)	Consumer's Uruguayan Identification Number(CI). Must be string between 6 and 8 digits.

Business Attributes

Business attributes are groups of additional risk attributes which are in close relation with the merchant business category. Some/All of them can be required at our risk team's discretion and will be used for internal reporting only. These business attributes can be submitted with a standard card transaction on Processing API and WPF processing.

Business categories:

Segment	MCC
Airlines Air Carriers	
Airlines, Air Carriers	4511
Airlines	3000 - 3302
Event Management	
Consulting, Public Relations	7392
Miscellaneous General Services	7299
Theatrical Ticket Agencies	7922
Direct Marketing - Other	5969
Furniture	
Furniture, Home Furnishings, and Equipment Stores, Except Appliances	5712
Office and Commercial Furniture	5021
Hotels and Real estate Rentals	
Hotels/Motels/Inns/Resorts	3501 - 3790
Real Estate Agents and Managers - Rentals	6513
Lodging – Hotels, Motels, Resorts, Central Reservation Services (not elsewhere classified)	7011
Timeshares	7012
Car, plane and Boat rentals	
Car Rental	3351 - 3441
Taxicabs and Limousines	4121
Bus Lines, Including Charters, Tour Buses	4131
Boat Rentals and Leases	4457
Transportation Services, (Not elsewhere classified)	4789
Car Rental Companies	7512
Truck and Utility Trailer Rentals	7513
Motor Home and Recreational Vehicle Rentals	7519
Cruise Lines	
Cruise Lines	4411
Travel Agencies	
Travel Agencies	4722
Package Tour Operators (For use in Germany only)	4723
Direct Marketing - Travel-related Arrangement Services	5962

Specific attributes for each business category can be found in the following table:

Attribute	Type	Description
Airlines Air Carriers		
flight_arrival_date	string	The date when the flight arrives in format dd-mm-yyyy
flight_departure_date	string	The date when the flight departs in format dd-mm-yyyy
airline_code	string	The code of Airline
airline_flight_number	string	The flight number

Attribute	Type	Description
flight_ticket_number	string	The number of the flight ticket
flight_origin_city	string	The origin city of the flight
flight_destination_city	string	The destination city of the flight
airline_tour_operator_name	string	The name of tour operator
Event Management		
event_start_date	string	The date when event starts in format dd-mm-yyyy
event_end_date	string	The date when event ends in format dd-mm-yyyy
event_organizer_id	string	
event_id	string	
Furniture		
date_of_order	string	The date when order was placed in format dd-mm-yyyy
delivery_date	string	Date of the expected delivery in format dd-mm-yyyy
name_of_the_supplier	string	
Hotels and Real estate rentals		
check_in_date	string	The data when the customer check-in in format dd-mm-yyyy
check_out_date	string	The data when the customer check-out in format dd-mm-yyyy
travel_agency_name	string	
Car, Plane and Boat Rentals		
vehicle_pick_up_date	string	The date when customer takes the vehicle in format dd-mm-yyyy
vehicle_return_date	string	The date when the customer returns the vehicle back in format dd-mm-yyyy
supplier_name	string	The name of supplier/contractor
Cruise Lines		
cruise_start_date	string	The date when cruise begins in format dd-mm-yyyy
cruise_end_date	string	The date when cruise ends in format dd-mm-yyyy
Travel Agencies		
arrival_date	string	The date of arrival in format dd-mm-yyyy
departure_date	string	The date of departure in format dd-mm-yyyy
carrier_code	string	The code of the carrier
flight_number	string	The number of the flight
ticket_number	string	The number of the ticket
origin_city	string	The origin city
destination_city	string	The destination city
travel_agency	string	The name of the travel agency
contractor_name	string	The name of the contractor
atol_certificate	string	ATOL certificate number
pick_up_date	string	Pick-up date in format dd-mm-yyyy
return_date	string	Return date in format dd-mm-yyyy

Transaction types with business attributes:

- authorize
- authorize3d
- capture
- sale
- sale3d
- init_recurring_sale
- init_recurring_sale3d
- recurring_sale

Reconcile

Reconcile can be used to retrieve data about a transaction. This can be useful if you want to retrieve information about a transaction whose status is timeout, which returned an error or has changed eg. has beed chargebacked.

Reconcile request are handled exactly like transaction requests via XML.

Single Transaction

The URL for single transaction reconciling is similar to the processing url:

`https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN`

Reconcile By Unique Id Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('44177a21403427eb96664a6d7e5d5d48');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("44177a21403427eb96664a6d7e5d5d48");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "44177a21403427eb96664a6d7e5d5d48"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  </reconcile>'
```

Reconcile By Arn Request

```
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setArn('74537605248535042582882');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setArn("74537605248535042582882");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```node
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "arn": "74537605248535042582882"
  }
).send()
  .then(success)
  .catch(failure);
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <arn>74537605248535042582882</arn>
  </reconcile>'
```

Reconcile By Transaction Id Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setTransactionId('merchant-transaction-id-here');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setTransactionId("merchant-transaction-id-here");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "transaction_id": "merchant-transaction-id-here"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <transaction_id>merchant-transaction-id-here</transaction_id>
  </reconcile>'
```

XML Request to reconcile:

Note that reconcile can be done via either unique_id, ARN or transaction_id

XML Response:

Response is a standard payment response like it would be returned by any transaction. It can have either state as shown in the states section.

Successful Sale Transaction Reconciliation Response

```
stdClass Object
(
    [transaction_type] => sale
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [mode] => live
    [timestamp] => 2021-02-04T15:26:26Z
    [descriptor] => Descriptor one
    [amount] => 9000
    [currency] => USD
    [card_brand] => visa
    [card_number] => 420000...0000
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```
<payment_response content=[
    <transaction_type content=[sale]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[live]>
    <timestamp content=[2021-02-04T15:26:26Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[9000]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[420000...0000]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```
{
    transaction_type: "sale",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "1196432505475 01c79d8295",
    mode: "live",
    timestamp: "2021-02-04T15:26:26Z",
    descriptor: "Descriptor one",
    amount: "9000",
    currency: "USD",
    card_brand: "visa",
    card_number: "420000...0000",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```



```
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>sale</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-04T15:26:26Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>9000</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>420000...0000</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_response>
```


Card brand and card number will be available in response only for card transaction types.

The reference transaction unique id is also returned when a reference-based transaction has been queried via the Reconcile API.

Successful Refund Transaction Reconciliation Response


```
stdClass Object
(
    [transaction_type] => refund
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 5de39380bf7ac7e1fc31cbd7805dc0ec
    [transaction_id] => 1196432505475 01c79d8295
    [mode] => live
    [timestamp] => 2021-02-04T15:26:26Z
    [descriptor] => Descriptor one
    [amount] => 9000
    [currency] => USD
    [card_brand] => visa
    [card_number] => 420000...0000
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [reference_transaction_unique_id] => 44177a21403427eb96664a6d7e5d5d48
)
```

```xml
<payment_response content=[
    <transaction_type content=[refund]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[5de39380bf7ac7e1fc31cbd7805dc0ec]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <mode content=[live]>
    <timestamp content=[2021-02-04T15:26:26Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[9000]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[420000...0000]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <reference_transaction_unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
]>
```

```json
{
    transaction_type: "refund",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "5de39380bf7ac7e1fc31cbd7805dc0ec",
    transaction_id: "1196432505475 01c79d8295",
    mode: "live",
    timestamp: "2021-02-04T15:26:26Z",
    descriptor: "Descriptor one",
    amount: "9000",
    currency: "USD",
    card_brand: "visa",
    card_number: "420000...0000",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    reference_transaction_unique_id: "44177a21403427eb96664a6d7e5d5d48",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>refund</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>5de39380bf7ac7e1fc31cbd7805dc0ec</unique_id>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-04T15:26:26Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>9000</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>420000...0000</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <reference_transaction_unique_id>44177a21403427eb96664a6d7e5d5d48</reference_transaction_unique_id>
</payment_response>
```


Captured flag and possible remaining capturable amount would be returned when an authorization transaction has been queried via the Reconcile API.

Successful Authorize Transaction Reconciliation Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [mode] => live
    [timestamp] => 2021-02-04T15:26:26Z
    [descriptor] => Descriptor one
    [amount] => 500
    [currency] => USD
    [card_brand] => visa
    [card_number] => 420000...0000
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [captured] => false
    [capturable_amount] => 500
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[live]>
    <timestamp content=[2021-02-04T15:26:26Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[500]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[420000...0000]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <captured content=[false]>
    <capturable_amount content=[500]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```
{
    transaction_type: "authorize",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "119643250547501c79d8295",
    mode: "live",
    timestamp: "2021-02-04T15:26:26Z",
    descriptor: "Descriptor one",
    amount: "500",
    currency: "USD",
    card_brand: "visa",
    card_number: "420000...0000",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    captured: "false",
    capturable_amount: "500",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-04T15:26:26Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>500</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>420000...0000</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <captured>false</captured>
  <capturable_amount>500</capturable_amount>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_response>
```


For some transaction types current funds status will also be available in the reconcile response. Note that refunds on those transactions will have funds status on the following day of the transaction. For more information please contact tech-support.


```xml
Successful Transaction Reconciliation Response with funds status attribute


<?xml version='1.0' encoding='UTF-8'?>
  <payment_response>
    <transaction_type>aura</transaction_type>
    <status>approved</status>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <code>940</code>
    <mode>live</mode>
    <technical_message>Transaction successful!</technical_message>
    <message>Transaction successful!</message>
    <timestamp>2020-11-03T07:25:10Z</timestamp>
    <descriptor>Descriptor one</descriptor>
    <amount>50</amount>
    <currency>USD</currency>
    <funds_status>SUCCEEDED</funds_status>
  </payment_response>
```


PREAUTHORIZATION

Custom response data will be returned when aPreauthorization transaction has been queried via the Reconcile API.

Name	Type	Description
preauthorization	"true"	Preauthorization flag
preauthorization_expires_at	string	Preauthorization expiration date time inISO 8601 Combined date and time, e.g. 2007-08-30T17:46:11Z
preauthorization_total_amount	integer	Total preauthorization amount (initial + topup amount)
capturable_amount	integer	The total amount that can be captured
captured_amount	integer	The total captured amount
reversed_amount	integer	The total reversed amount
reversible_amount	integer	The total reversible amount

The total capturable amount will be decreased in case there is/are already submitted partial reversal(s).

Successful Preauthorization Reconciliation Response

```
stdClass Object
(
    [transaction_type] => authorize
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [mode] => live
    [timestamp] => 2021-02-04T15:26:26Z
    [descriptor] => Descriptor one
    [amount] => 5000
    [currency] => USD
    [card_brand] => master
    [card_number] => 555555...4444
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [preauthorization] => true
    [preauthorization_expires_at] => 2021-03-07T17:26:26+02:00
    [preauthorization_total_amount] => 10000
    [captured] => false
    [capturable_amount] => 8000
    [captured_amount] => 0
    [reversed_amount] => 2000
    [reversible_amount] => 8000
)
```

```
<payment_response content=[
    <transaction_type content=[authorize]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[live]>
    <timestamp content=[2021-02-04T15:26:26Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[5000]>
    <currency content=[USD]>
    <card_brand content=[master]>
    <card_number content=[555555...4444]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <preauthorization content=[true]>
    <preauthorization_expires_at content=[2021-03-07T17:26:26+02:00]>
    <preauthorization_total_amount content=[10000]>
    <captured content=[false]>
    <capturable_amount content=[8000]>
    <captured_amount content=[0]>
    <reversed_amount content=[2000]>
    <reversible_amount content=[8000]>
]>
```

```
{
    transaction_type: "authorize",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "119643250547501c79d8295",
    mode: "live",
    timestamp: "2021-02-04T15:26:26Z",
    descriptor: "Descriptor one",
    amount: "5000",
    currency: "USD",
    card_brand: "master",
    card_number: "555555...4444",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    preauthorization: "true",
    preauthorization_expires_at: "2021-03-07T17:26:26+02:00",
    preauthorization_total_amount: "10000",
    captured: "false",
    capturable_amount: "8000",
    captured_amount: "0",
    reversed_amount: "2000",
    reversible_amount: "8000",
}
```



```
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <mode>live</mode>
  <timestamp>2021-02-04T15:26:26Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>5000</amount>
  <currency>USD</currency>
  <card_brand>master</card_brand>
  <card_number>555555...4444</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <preauthorization>true</preauthorization>
  <preauthorization_expires_at>2021-03-07T17:26:26+02:00</preauthorization_expires_at>
  <preauthorization_total_amount>10000</preauthorization_total_amount>
  <captured>false</captured>
  <capturable_amount>8000</capturable_amount>
  <captured_amount>0</captured_amount>
  <reversed_amount>2000</reversed_amount>
  <reversible_amount>8000</reversible_amount>
</payment_response>
```

By date range

Date range based reconciliation allows you to fetch information for all payment transactions from a terminal within a given date range. The response is paginated, each request will return 100 entries max.

The URL for date range reconciling is:

`https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/by_date/TERMINAL-TOKEN`

Reconcile By Date Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\DateRange');
    $request = $genesis->request();

    $request
        ->setStartDate('2014-01-01 09:20:00')
        ->setEndDate('2014-01-31 21:30:00')
        ->setPage('2');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileByDate;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileByDate request = new ReconcileByDate();

    request.setStartDate("2014-01-01 09:20:00");
    request.setEndDate("2014-01-31 21:30:00");
    request.setPage("2");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```node
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile_by_date(
  {
    "start_date": "2014-01-01 09:20:00",
    "end_date": "2014-01-31 21:30:00",
    "page": 2
  }
).send()
  .then(success)
  .catch(failure);
```

```curl
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/by_date/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <start_date>2014-01-01 09:20:00</start_date>
    <end_date>2014-01-31 21:30:00</end_date>
    <page>2</page>
  </reconcile>'
```

Parameter	Required	Format	Description
start_date	required	yyyy-mm-dd hh:mm:ss	start of the requested date range (time is optional)
end_date	optional	yyyy-mm-dd hh:mm:ss	end of the requested date range (time is optional)
page	optional	integer the page within the paginated result, defaults to 1	

Response:

The attributes in the root node payment responses include information about the pagination of the response.


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_responses per_page="100" page="2" total_count="19" pages_count="7">
  <payment_response>
    <transaction_type>sale</transaction_type>
    <status>approved</status>
    <authorization_code>005645</authorization_code>
    <response_code>00</response_code>
    <unique_id>130319cfb3bf65ff3c4a4045487b174f</unique_id>
    <transaction_id>EFBFBC7D-82CD-4375-9A69-15F19C88A134</transaction_id>
    <technical_message>Transaction successful!</technical_message>
    <message>Transaction successful!</message>
    <mode>live</mode>
    <timestamp>2014-01-03T15:04:00Z</timestamp>
    <descriptor>descriptor one</descriptor>
    <amount>500</amount>
    <currency>USD</currency>
    <card_brand>visa</card_brand>
    <card_number>420000...0000</card_number>
    <card_holder>John Doe</card_holder>
    <expiration_year>2020</expiration_year>
    <expiration_month>2</expiration_month>
    <sent_to_acquirer>true</sent_to_acquirer>
  </payment_response>
  <payment_response>
    <transaction_type>sale</transaction_type>
    <status>approved</status>
    <authorization_code>638745</authorization_code>
    <response_code>00</response_code>
    <unique_id>130319cfb3bf65ff3c4a4045487b173f</unique_id>
    <transaction_id>BBD7945B-BE57-4A14-A7FB-47F7AE928D95</transaction_id>
    <technical_message>Transaction successful!</technical_message>
    <message>Transaction successful!</message>
    <mode>live</mode>
    <timestamp>2014-01-05T15:04:00Z</timestamp>
    <descriptor>descriptor one</descriptor>
    <amount>500</amount>
    <currency>USD</currency>
    <card_brand>visa</card_brand>
    <card_number>420000...0000</card_number>
    <card_holder>John Doe</card_holder>
    <expiration_year>2020</expiration_year>
    <expiration_month>2</expiration_month>
    <sent_to_acquirer>true</sent_to_acquirer>
  </payment_response>
  <payment_response>
    <transaction_type>sale</transaction_type>
    <status>approved</status>
    <authorization_code>226534</authorization_code>
    <response_code>00</response_code>
    <unique_id>1e8a6f09253eb8b4f8c84c0d8803713e</unique_id>
    <transaction_id>_5041_2013041012_22_10_545</transaction_id>
    <technical_message>Transaction successful!</technical_message>
    <message>Transaction successful!</message>
    <mode>live</mode>
    <timestamp>2013-01-09T10:22:13Z</timestamp>
    <descriptor>test_descriptor</descriptor>
    <amount>50422</amount>
    <currency>EUR</currency>
    <card_brand>visa</card_brand>
    <card_number>420000...0000</card_number>
    <card_holder>John Doe</card_holder>
    <expiration_year>2020</expiration_year>
    <expiration_month>2</expiration_month>
    <sent_to_acquirer>true</sent_to_acquirer>
  </payment_response>
  <payment_response>
    <transaction_type>sale3d</transaction_type>
    <status>pending_async</status>
    <unique_id>5dbdb4c677ee16b8fb1e43483164be2c</unique_id>
    <transaction_id>_6547_2013041012_23_08_470</transaction_id>
    <technical_message>Transaction successful!</technical_message>
    <message>Transaction successful!</message>
    <redirect_url>https://staging.gate.e-comprocessing.net/redirect/to_acquirer/5dbdb4c677</redirect_url>
    <mode>live</mode>
    <timestamp>2014-01-10T10:23:10Z</timestamp>
    <descriptor>test_descriptor</descriptor>
    <amount>100</amount>
    <currency>EUR</currency>
    <card_brand>visa</card_brand>
    <card_number>471110...0000</card_number>
    <card_holder>John Doe</card_holder>
    <expiration_year>2020</expiration_year>
    <expiration_month>2</expiration_month>
```

```
    <sent_to_acquirer>true</sent_to_acquirer>
  </payment_response>
  <payment_response>
    <transaction_type>refund</transaction_type>
    <status>approved</status>
    <authorization_code>005645</authorization_code>
    <response_code>00</response_code>
    <unique_id>44177a21403427eb96664a6d7e5d5d49</unique_id>
    <transaction_id>1196432505475 01c79d8296</transaction_id>
    <technical_message>Transaction successful!</technical_message>
    <message>Transaction successful!</message>
    <mode>test</mode>
    <timestamp>2014-01-30T14:21:48Z</timestamp>
    <descriptor>descriptor one</descriptor>
    <amount>9000</amount>
    <currency>USD</currency>
    <sent_to_acquirer>true</sent_to_acquirer>
    <reference_transaction_unique_id>44177a21403427eb96664a6d7e5d5d48</reference_transaction_unique_id>
   </payment_response>
  ...
</payment_responses>
```

Name	Type	Description
@per_page	integer	number of entries per page
@page	integer	the current page
@total_count	integer	total number of all entries
@pages_count	integer	total number of pages

Payment Authorizations

PAYMENT AUTHORIZATIONS API

The Payment Authorizations API can be used to retrieve data about payment authorizations.

Payment Authorizations can be retrieved by date

BY DATE RANGE

Date range based retrieval allows you to fetch information for all payment authorizations for a given merchant within a given date range. Date range searches for payment authorizations by their creation date. The response is paginated, each request will return 100 entries max.

The URLs for date range payment authorizations retrieval are:

Production:

`https://gate.e-comprocessing.net/payment_authorizations/by_date`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/payment_authorizations/by_date`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/payment_authorizations/by_date \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_authorization_request>
    <start_date>2014-01-01</start_date>
    <end_date>2014-01-31</end_date>
    <auth_start_date>2014-01-01</auth_start_date>
    <auth_end_date>2014-01-31</auth_end_date>
    <externally_processed>external</externally_processed>
    <processing_type>all</processing_type>
    <page>1</page>
  </payment_authorization_request>'
```

Request Parameters

Parameter	Required	Format	Description

Parameter	Required	Format	Description
start_date	required*	yyyy-mm-dd	start of the requested date range
end_date	optional	yyyy-mm-dd	end of the requested date range
auth_start_date	required*	yyyy-mm-dd	start of the requested auth date range
auth_end_date	optional	yyyy-mm-dd	end of the requested auth date range
page	optional	integer	the page within the paginated result, defaults to 1
per_page	optional	integer	Number of entities on page, defaults to 100
externally_processed	optional	string(255)	Filters transactions by being externally processed: or being native to Genesis. Possible values include 'genesis', 'external', and 'all'. If flag not supplied, it defaults to 'genesis'
processing_type	optional	string(255)	Filters transactions by being card present or card not present. Possible values include 'card_present', 'card_not_present', and 'all'. If flag not supplied, it defaults to 'all'.

`required* = conditionally required`

Note: One of **start_date** and **auth_start_date** is required.

Successful Response Parameters

Parameter	Type	Description
merchant_number	string(20)	Merchant number
record_number	string	Unique identifier for the authorizations
card_number	string(19)	Masked card number
exp_date	string(4)	Expiry MMYY
currency	string(3)	Currency
amount	integer	Amount in minor currency unit, seeCurrency and Amount Handling for details
auth_code	string(6)	Authorization code
auth_date	string	Authorization date in date and time format
resp_code	string	Description of the response code
reversed	string(1)	Contains the character Y if the authorisation has been reversed else N
pos_entry_mode	string(3)	POS Entry Mode
voice	string(1)	Y if this is a voice authorisation, N otherwise
avs_result	string(1)	AVS Result
cvv2_result	string(1)	CVV2 Result
card_type	string(1)	Card Type code
ecom_type	string(5)	Indicator for electronic commerce transactions
eci_sli	string(2)	Visa card scheme ECI / MasterCard SLI
rrn	string(12)	Retrieval Reference Number
card_acceptor	string(40)	Card Acceptor Name and Location
mcc	string(4)	Merchant category code
trace	integer	Trace number. All messages belonging the same transaction have to have the same trace value
type	string(1)	Transaction Type
card_sub_type	string(8)	Card Subtype
terminal_id	string(15)	Terminal ID
unique_tran_id	string(36)	Unique Transaction Identifier

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_authorizations_responses per_page="100" page="1" total_count="2" pages_count="1">
  <payment_authorizations_response>
    <xml_root>payment_authorization_response</xml_root>
    <merchant_number>605000000002029</merchant_number>
    <record_number>33202414090</record_number>
    <card_number>465944******7359</card_number>
    <exp_date/>
    <currency>EUR</currency>
    <amount>1234</amount>
    <auth_code>15056</auth_code>
    <auth_date>2019-06-10 16:17:18 UTC</auth_date>
    <resp_code>Transaction approved</resp_code>
    <reversed>N</reversed>
    <pos_entry_mode>102</pos_entry_mode>
    <voice>N</voice>
    <avs_result/>
    <cvv2_result>M</cvv2_result>
    <card_type>M</card_type>
    <ecom_type/>
    <eci_sli>21</eci_sli>
    <rrn>916116130233</rrn>
    <card_acceptor>test.bg                12629314     BG</card_acceptor>
    <mcc>7995</mcc>
    <trace>1130233</trace>
    <type/>
    <card_sub_type/>
    <terminal_id>53b1f5eacc9edd</terminal_id>
    <unique_tran_id/>
  </payment_authorizations_response>
  <payment_authorizations_response>
    <merchant_number>605000000002029</merchant_number>
    <record_number>33202414090</record_number>
    <card_number>465944******7359</card_number>
    <exp_date/>
    <currency>EUR</currency>
    <amount>1234</amount>
    <auth_code>15056</auth_code>
    <auth_date>2019-06-10 16:17:18 UTC</auth_date>
    <resp_code>Transaction approved</resp_code>
    <reversed>N</reversed>
    <pos_entry_mode>102</pos_entry_mode>
    <voice>N</voice>
    <avs_result/>
    <cvv2_result>M</cvv2_result>
    <card_type>M</card_type>
    <ecom_type/>
    <eci_sli>21</eci_sli>
    <rrn>916116130233</rrn>
    <card_acceptor>test.bg                12629314     BG</card_acceptor>
    <mcc>7995</mcc>
    <trace>1130233</trace>
    <type/>
    <card_sub_type/>
    <terminal_id>53b1f5eacc9edd</terminal_id>
    <unique_tran_id/>
  </payment_authorizations_response>
</payment_authorizations_responses>
```


The attributes in the root node payment authorization responses includes information about the pagination of the response.

Successful Response Parameters

Parameter	Type	Description
@per_page	integer	number of entries per page
@page	integer	the current page
@total_count	integer	total number of all entries
@pages_count	integer	total number of pages

Processed Transactions

PROCESSED TRANSACTION API

The Processed Transaction API can be used to retrieve data about processed transactions.

SINGLE PROCESSED TRANSACTION

Single processed transaction retrieval allows to get a certain processed transaction by its ARN or by passing its unique ID.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/processed_transactions \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <processed_transaction_request>
    <arn>74537604221431003881865</arn>
  </processed_transaction_request>'
```

OR

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/processed_transactions \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <processed_transaction_request>
    <unique_id>53b1f5eacc9e4d3a3afebb4e993fe962</unique_id>
  </processed_transaction_request>'
```

The URLs for the single processed transaction API are:

Production:

`https://gate.e-comprocessing.net/processed_transactions`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/processed_transactions`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<processed_transaction_response>
  <merchant_number>124000000006698</merchant_number>
  <batch_number>eMP</batch_number>
  <transaction_date>2019-09-01 16:43:02 UTC</transaction_date>
  <post_date>2019-09-01</post_date>
  <terminal_id>53b1f5eacc9eddda3afebb4e993fe962</terminal_id>
  <auth_code>09117B</auth_code>
  <currency>USD</currency>
  <amount>3690</amount>
  <merchant_transaction_reference>b76e9a54bdc99b3</merchant_transaction_reference>
  <arn>85301169244934771128812</arn>
  <card_brand>MC World Signia</card_brand>
  <card_number>420000...0000</card_number>
  <bin_country>124</bin_country>
  <service_type_desc>Credit Card</service_type_desc>
  <merchant_country>826</merchant_country>
  <area_of_event>Foreign - MASTER</area_of_event>
  <cross_rate>1</cross_rate>
  <card_scheme>Mastercard</card_scheme>
  <unique_id>b76e9a54bdc99b338068681727ed5e240000</unique_id>
  <type>purchase</type>
  <card_present>false</card_present>
  <deposit_slip_number>60506291293</deposit_slip_number>
  <batch_slip_number>60506282664</batch_slip_number>
  <fees>
    <fee>
      <type>Assessment fee</type>
      <amount>-0.74</amount>
      <currency>USD</currency>
      <charge_amount>-0.74</charge_amount>
      <charge_currency>USD</charge_currency>
    </fee>
  </fees>
</processed_transaction_response>
```


Successful Response Parameters

Parameter	Type	Description
merchant_number	string(20)	Merchant number
batch_number	string(23)	Batch number
transaction_date	string(255)	Transaction date in date and time format
post_date	string(255)	Posting date
terminal_id	string(10)	Terminal ID
arn	string(23)	Acquirer reference number
merchant_transaction_reference	string(23)	Merchant's transaction reference number
card_scheme	string(16)	Descriptive text for the card scheme
service_type_desc	string(25)	Indicates if transaction is a Debit or Credit transaction
card_brand	string(3)	Scheme card brand
card_number	string(13)	Masked card number
bin_country	string(3)	Issuing BIN ISO Country Code from Scheme BIN tables
merchant_country	string(3)	3 digit ISO country code of the merchant country
area_of_event	string(19)	Area of event
currency	string(3)	Currency of transaction
cross_rate	float(11)	FX rate to convert from transaction account to merchant funding currency
auth_code	string(6)	Authorization code
unique_id	string(36)	Unique Transaction Identifier is generated at PoS before sent for authorisation or offline approval
card_present	boolean	Transaction is card present or card not present
deposit_slip_number	string(11)	Deposit Slip Number
batch_slip_number	string(11)	Batch Slip Number
type	string(65)	Transaction type for the related charge posted to account
fees		
type	string(65)	Transaction type for the related charge posted to account
amount	float	Calculated charge amount in transaction in major currency unit, seeCurrency and Amount Handling for details.

Parameter	Type	Description
currency	string(3)	Currency of transaction
charge_amount	float	Calculated charge amount in charge currency in major currency unit, seeCurrency and Amount Handling for details.
charge_currency	string(3)	Currency of charge

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<processed_transaction_response>
  <status>error</status>
  <code>465</code>
  <message>Processed transaction not found!</message>
  <technical_message>Processed transaction by the given criteria cannot be found!</technical_message>
</processed_transaction_response>
```

In case no processed transaction is found for the given ARN or unique ID, a corresponding XML response is as follows:

BY DATE OR POST DATE RANGE

Date range based processed transaction retrieval allows you to fetch information for all processed transactions for a given merchant within a given date range. Date range searches for processed transactions either by their creation or posting date. The response is paginated, each request will return 100 entries max.

The URLs for date range processed transaction retrieval are:

Production:

`https://gate.e-comprocessing.net/processed_transactions/by_date`

`https://gate.e-comprocessing.net/processed_transactions/by_post_date`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/processed_transactions/by_date`

`https://staging.gate.e-comprocessing.net/processed_transactions/by_post_date`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/processed_transactions/by_post_date \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <processed_transaction_request>
    <start_date>2014-01-01</start_date>
    <end_date>2014-01-31</end_date>
    <batch_number>2065063</batch_number>
    <batch_slip_number>366236636</batch_slip_number>
    <deposit_slip_number>224234433</deposit_slip_number>
    <externally_processed>external</externally_processed>
    <processing_type>all</processing_type>
    <page>1</page>
  </processed_transaction_request>'
```

Request Parameters

Parameter	Required	Format	Description
start_date	required	yyyy-mm-dd	start of the requested date range
end_date	optional	yyyy-mm-dd	end of the requested date range
page	optional	integer	the page within the paginated result, defaults to 1

Parameter	Required	Format	Description
per_page	optional	integer	Number of entities on page, defaults to 100
batch_number	optional	string(255)	Batch number of processed transactions (only for `by_post_date` API call)
batch_slip_number	optional	string(255)	Batch slip number of processed transactions (only for `by_post_date` API call)
deposit_slip_number	optional	string(255)	Deposit slip number of processed transactions (only for `by_post_date` API call)
externally_processed	optional	string(255)	Filters transactions by being externally processed or being native to Genesis. Possible values include 'genesis', 'external', and 'all'. If flag not supplied, it defaults to 'genesis'
processing_type	optional	string(255)	Filters transactions by being card present or card not present. Possible values include 'card_present', 'card_not_present', and 'all'. If flag not supplied, it defaults to 'all'.

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```


```xml
<?xml version="1.0" encoding="UTF-8"?>
<processed_transaction_responses per_page="100" page="1" total_count="2" pages_count="1">
  <processed_transaction_response>
    <merchant_number>1240000000006698</merchant_number>
    <batch_number>eMP</batch_number>
    <transaction_date>2019-09-01 16:43:02 UTC</transaction_date>
    <post_date>2019-09-01</post_date>
    <terminal_id>53b1f5eacc9eddda3afebb4e993fe962</terminal_id>
    <auth_code>09117B</auth_code>
    <currency>USD</currency>
    <amount>3690</amount>
    <merchant_transaction_reference>b76e9a54bdc99b3</merchant_transaction_reference>
    <card_brand>MC World Signia</card_brand>
    <card_number>420000...0000</card_number>
    <bin_country>124</bin_country>
    <service_type_desc>Credit Card</service_type_desc>
    <merchant_country>826</merchant_country>
    <area_of_event>Foreign - MASTER</area_of_event>
    <cross_rate>1</cross_rate>
    <card_scheme>Mastercard</card_scheme>
    <unique_id>b76e9a54bdc99b338068681727ed5e240000</unique_id>
    <type>purchase</type>
    <card_present>false</card_present>
    <deposit_slip_number>60506291293</deposit_slip_number>
    <batch_slip_number>60506282664</batch_slip_number>
    <arn>85301169244934771128812</arn>
  </processed_transaction_response>
  <processed_transaction_response>
    <merchant_number>1240000000006698</merchant_number>
    <batch_number>eMP</batch_number>
    <transaction_date>2019-09-01 16:43:02 UTC</transaction_date>
    <post_date>2019-09-01</post_date>
    <terminal_id>53b1f5eacc9eddda3afebb4e993fe962</terminal_id>
    <auth_code>09117B</auth_code>
    <currency>USD</currency>
    <amount>3690</amount>
    <merchant_transaction_reference>b76e9a54bdc99b3</merchant_transaction_reference>
    <card_brand>MC World Signia</card_brand>
    <card_number>420000...0000</card_number>
    <bin_country>124</bin_country>
    <service_type_desc>Credit Card</service_type_desc>
    <merchant_country>826</merchant_country>
    <area_of_event>Foreign - MASTER</area_of_event>
    <cross_rate>1</cross_rate>
    <card_scheme>Mastercard</card_scheme>
    <unique_id>b76e9a54bdc99b338068681727ed5e240000</unique_id>
    <type>purchase</type>
    <card_present>false</card_present>
    <deposit_slip_number>60506291293</deposit_slip_number>
    <batch_slip_number>60506282664</batch_slip_number>
    <arn>85301169244934771128812</arn>
    <fees>
      <fee>
        <type>Assessment fee</type>
        <amount>-0.74</amount>
        <currency>USD</currency>
        <charge_amount>-0.74</charge_amount>
        <charge_currency>USD</charge_currency>
      </fee>
    </fees>
  </processed_transaction_response>
</processed_transaction_responses>
```


The attributes in the root node processed transaction responses includes information about the pagination of the response.

Successful Response Parameters

Parameter	Type	Description
@per_page	integer	number of entries per page
@page	integer	the current page
@total_count	integer	total number of all entries
@pages_count	integer	total number of pages

Processed Batches

PROCESSED BATCHES API

The Processed Batches API can be used to retrieve data about processed batches.

BY DATE OR POST DATE RANGE

Date range based processed batch retrieval allows you to fetch information for all processed batches for a given merchant within a given date range. Date range searches for processed batchess by their posting date. The response is paginated, each request will return 100 entries max.

The URLs for date range processed batch retrieval are:

Production:

`https://gate.e-comprocessing.net/processed_batches/by_post_date`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/processed_batches/by_post_date`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/processed_batches/by_post_date \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <processed_batch_request>
   <start_date>2014-01-01</start_date>
   <end_date>2014-01-31</end_date>
   <batch_slip_number>3354345543</batch_slip_number>
   <page>1</page>
 </processed_batch_request>'
```

Request Parameters

Parameter	Required	Format	Description
start_date	required	yyyy-mm-dd	start of the requested date range
end_date	optional	yyyy-mm-dd	end of the requested date range
batch_slip_number	optional	string(255)	Batch slip number of processed transactions
page	optional	integer	the page within the paginated result, defaults to 1
per_page	optional	integer	Number of entities on page, defaults to 100

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<processed_batch_responses per_page="100" page="1" total_count="2" pages_count="1">
  <processed_batch_response>
    <merchant_number>105000000002227</merchant_number>
    <batch_number>eMP</batch_number>
    <batch_slip_number>94280612195</batch_slip_number>
    <batch_date>2019-10-24</batch_date>
    <post_date>2019-10-24</post_date>
    <terminal_id>53b1f5eacc9eddda3afebb4e993fe962</terminal_id>
    <transaction_type>Misc. DR transaction</transaction_type>
    <number_of_transactions>3</number_of_transactions>
    <currency>EUR</currency>
    <amount>370</amount>
  </processed_batch_response>
</processed_batch_responses>
```

The attributes in the root node processed batch responses includes information about the pagination of the response.

Successful Response Parameters

Parameter	Type	Description
per_page	integer	number of entries per page
page	integer	the current page
total_count	integer	total number of all entries
pages_count	integer	total number of pages
batch_number	string(23)	Batch number.
batch_slip_number	string(11)	Batch slip number of the transaction.
batch_date	yyyy-mm-dd	Batch date.
post_date	yyyy-mm-dd	Posting date.
terminal_id	string(10)	Terminal ID.
transaction_type	string(28)	The type of the transaction.
number_of_transactions	integer	The number of the transactions.
currency	string(3)	The currency of the transactions.
amount	float	The amount of the entry in major currency unit, see Currency and Amount Handling for details.

Chargebacks

Chargebacks are a special type of transactions as they cannot be triggered by the merchant. Charge- backs occur if a customer disputes to an item of his credit card bill at his issuing bank and the bank requests a chargeback. In this case, the amount is automatically refunded to the customers cc account and deducted from your merchant account.

Customers who initiate chargebacks will automatically be blocked for future transactions. For details, please contact our Risk team.

You can also see a chargeback overview in the merchant console under the Risk Management menu.

CHARGEBACK REVERSALS

The reversals could be split into two types. These are the chargeback reversals, which appear when the a chargeback dispute is cancelled (withdrawn) by the consumer/issuer and the representments, which appear when the merchant or the acquirer disputes an already received chargeback. Both of these chargeback event types are handled properly and integrated into the whole process of chargeback dispute procedure.

CHARGEBACK NOTIFICATIONS

You now have the option to receive API and/or email notifications for each chargeback event that occurs - e.g. for first chargebacks, second chargebacks, and representments. Enable this feature by emailing the IT Support team at tech-support@e-comprocessing.com with the chargeback notification URL if needed.

The email notifications are sent to the merchant user with role 'admin' which is configured for managing the merchant entity on the gateway platform. The API notifications are equal to Notification for asynchronous payments, please refer to the section Notification for asynchronous payments to understand how notifications work.

Chargeback Notification Example

```
?transaction_id=343d9040a671c45832ee5381860e2996
&terminal_token=f4266042a6131b666060beb75691341d78ee5b4f
&unique_id=57ff74d1ca8727f59f243de6d01ff027
&transaction_type=sale
&status=chargebacked
&signature=ab4348afa9830834df90069646e4ce66c39a5358
&amount=100
&event=chargeback
```

CHARGEBACK API

The Chargeback API can be used to retrieve data about chargebacks.

SINGLE CHARGEBACK

Single chargeback retrieval allows to get a certain chargeback by its ARN or by passing the unique ID of the original transaction.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/chargebacks \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <chargeback_request>
    <arn>74537604221431003881865</arn>
  </chargeback_request>'
```

OR

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/chargebacks \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <chargeback_request>
    <original_transaction_unique_id>53b1f5eacc9e4d3a3afebb4e993fe962</original_transaction_unique_id>
  </chargeback_request>'
```

LIST OF CHARGEBACKS

Retrieve a list of chargebacks by ARN or by passing the unique ID of the original transaction.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/chargebacks \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <chargeback_request>
    <arn>74537604221431003881865</arn>
    <mode>list</mode>
  </chargeback_request>'
```

OR

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/chargebacks \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <chargeback_request>
    <original_transaction_unique_id>53b1f5eacc9e4d3a3afebb4e993fe962</original_transaction_unique_id>
    <mode>list</mode>
  </chargeback_request>'
```

The URLs for single and list of chargebacks API are:

Production:

`https://gate.e-comprocessing.net/chargebacks`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/chargebacks`

Successful Response

```
stdClass Object
(
    [type] => 1st Chargeback
    [post_date] => 2014-01-24
    [reason_code] => 4855
    [merchant_number] => 443344323459841
    [reason_description] => Non-receipt of merchandise
    [authorization_code] => 811714
    [batch_number] => 2093064
    [cnn] => 9002578764
    [merchant_transaction_reference] => b76e9a54bdc99b3
    [capture_method] => SET/3D-SET authenticated
    [amount] => -14625
    [currency] => USD
    [chargeback_amount] => 300.0
    [chargeback_currency] => EUR
    [original_transaction_amount] => 148.0
    [original_transaction_currency] => EUR
    [merchant_settlement_amount] => 148.0
    [merchant_settlement_currency] => EUR
    [network_settlement_amount] => 148.0
    [network_settlement_currency] => EUR
    [merchant_dba_name] => hyperstech.com
    [original_type] => Purchase
    [original_post_date] => 2019-06-28
    [original_transaction_date] => 2019-06-28
    [original_slip] => 92572791484
    [item_slip_number] => 93778283100
    [card_number] => 554960******5069
    [card_brand] => master
    [customer_email] => jonh_doe@example.com
    [customer_phone] => 3598851248512
    [transaction_type] => sale3d
    [original_transaction_unique_id] => f9634ec5e7dbe6ca3871974accb875cd
    [arn] => 74537604221431003881865
)
```

```
<payment_response content=[
    <type content=[1st Chargeback]>
    <post_date content=[2014-01-24]>
    <reason_code content=[4855]>
    <merchant_number content=[443344323459841]>
    <reason_description content=[Non-receipt of merchandise]>
    <authorization_code content=[811714]>
    <batch_number content=[2093064]>
    <cnn content=[9002578764]>
    <merchant_transaction_reference content=[b76e9a54bdc99b3]>
    <capture_method content=[SET/3D-SET authenticated]>
    <amount content=[-14625]>
    <currency content=[USD]>
    <chargeback_amount content=[300.0]>
    <chargeback_currency content=[EUR]>
    <original_transaction_amount content=[148.0]>
    <original_transaction_currency content=[EUR]>
    <merchant_settlement_amount content=[148.0]>
    <merchant_settlement_currency content=[EUR]>
    <network_settlement_amount content=[148.0]>
    <network_settlement_currency content=[EUR]>
    <merchant_dba_name content=[hyperstech.com]>
    <original_type content=[Purchase]>
    <original_post_date content=[2019-06-28]>
    <original_transaction_date content=[2019-06-28]>
    <original_slip content=[92572791484]>
    <item_slip_number content=[93778283100]>
    <card_number content=[554960******5069]>
    <card_brand content=[master]>
    <customer_email content=[jonh_doe@example.com]>
    <customer_phone content=[3598851248512]>
    <transaction_type content=[sale3d]>
    <original_transaction_unique_id content=[f9634ec5e7dbe6ca3871974accb875cd]>
    <arn content=[74537604221431003881865]>
]>
```



```
{
    type: "1st Chargeback",
    post_date: "2014-01-24",
    reason_code: "4855",
    merchant_number: "443344323459841",
    reason_description: "Non-receipt of merchandise",
    authorization_code: "811714",
    batch_number: "2093064",
    cnn: "9002578764",
    merchant_transaction_reference: "b76e9a54bdc99b3",
    capture_method: "SET/3D-SET authenticated",
    amount: "-14625",
    currency: "USD",
    chargeback_amount: "300.0",
    chargeback_currency: "EUR",
    original_transaction_amount: "148.0",
    original_transaction_currency: "EUR",
    merchant_settlement_amount: "148.0",
    merchant_settlement_currency: "EUR",
    network_settlement_amount: "148.0",
    network_settlement_currency: "EUR",
    merchant_dba_name: "hyperstech.com",
    original_type: "Purchase",
    original_post_date: "2019-06-28",
    original_transaction_date: "2019-06-28",
    original_slip: "92572791484",
    item_slip_number: "93778283100",
    card_number: "554960******5069",
    card_brand: "master",
    customer_email: "jonh_doe@example.com",
    customer_phone: "3598851248512",
    transaction_type: "sale3d",
    original_transaction_unique_id: "f9634ec5e7dbe6ca3871974accb875cd",
    arn: "74537604221431003881865",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<chargeback_response>
  <type>1st Chargeback</type>
  <post_date>2014-01-24</post_date>
  <reason_code>4855</reason_code>
  <merchant_number>443344323459841</merchant_number>
  <reason_description>Non-receipt of merchandise</reason_description>
  <authorization_code>811714</authorization_code>
  <batch_number>2093064</batch_number>
  <cnn>9002578764</cnn>
  <merchant_transaction_reference>b76e9a54bdc99b3</merchant_transaction_reference>
  <capture_method>SET/3D-SET authenticated</capture_method>
  <amount>-14625</amount>
  <currency>USD</currency>
  <chargeback_amount>300.0</chargeback_amount>
  <chargeback_currency>EUR</chargeback_currency>
  <original_transaction_amount>148.0</original_transaction_amount>
  <original_transaction_currency>EUR</original_transaction_currency>
  <merchant_settlement_amount>148.0</merchant_settlement_amount>
  <merchant_settlement_currency>EUR</merchant_settlement_currency>
  <network_settlement_amount>148.0</network_settlement_amount>
  <network_settlement_currency>EUR</network_settlement_currency>
  <merchant_dba_name>hyperstech.com</merchant_dba_name>
  <original_type>Purchase</original_type>
  <original_post_date>2019-06-28</original_post_date>
  <original_transaction_date>2019-06-28</original_transaction_date>
  <original_slip>92572791484</original_slip>
  <item_slip_number>93778283100</item_slip_number>
  <card_number>554960******5069</card_number>
  <card_brand>master</card_brand>
  <customer_email>jonh_doe@example.com</customer_email>
  <customer_phone>3598851248512</customer_phone>
  <transaction_type>sale3d</transaction_type>
  <original_transaction_unique_id>f9634ec5e7dbe6ca3871974accb875cd</original_transaction_unique_id>
  <arn>74537604221431003881865</arn>
</chargeback_response>
```


Successful Response Parameters

Parameter	Type	Description
type	string(255)	The chargeback type. See chargeback types for details
post_date	string(255)	The date of the chargeback
reason_code	string(255)	Reason code of the chargeback
merchant_number	string(255)	Merchant number
reason_description	string(255)	Reason description of the chargeback
authorization_code	string(255)	Authorization code of the chargeback's transaction
batch_number	string(23)	The batch number is provided by the submitter of the original presentment
cnn	string(14)	Chargeback Control Number filled for chargebacks and representments; empty for transfer transactions.
merchant_transaction_reference	string(255)	Merchant's transaction reference number
capture_method	string(255)	Capture method
amount	integer	Amount in minor units in cardholder account currency. Amount can be negative for: 1st chargeback, 2nd chargeback, transfer reversal and positive for all other types, see Currency and Amount Handling for details.
currency	string(3)	Currency of the cardholder account. See ISO 4217
chargeback_amount	float	The amount in the chargeback's transaction currency, see Currency and Amount Handling for details.
chargeback_currency	string(3)	The currency of the chargeback's transaction. See ISO 4217
original_transaction_amount	float(18)	Amount of the original presentment in transaction currency, see Currency and Amount Handling for details.
original_transaction_currency	string(3)	Transaction currency of the original presentment
merchant_settlement_amount	float(18)	Amount settled with the merchant for the original presentment (that is, the amount posted to the merchant account), before the deduction of any charges, see Currency and Amount Handling for details.
merchant_settlement_currency	string(3)	Currency settled with the payment network for the presentment before the deduction of any charges.
network_settlement_amount	float(18)	Amount settled with the merchant for the original presentment (that is, the amount posted to the merchant account), before the deduction of any charges, see Currency and Amount Handling for details.
network_settlement_currency	string(3)	Currency settled with the payment network for the presentment before the deduction of any charges.
merchant_dba_name	string(25)	Merchant name in the transaction as cleared to the schemes (charge descriptor).
original_type	string(28)	Transaction type of the original presentment
original_post_date	date(8)	Original presentment posting date
original_transaction_date	date(8)	Transaction date of the original presentment

Parameter	Type	Description
original_slip	string(11)	OmniPay internal slip number of the original presentment
item_slip_number	string(11)	OmniPay internal slip number of the original presentment
card_number	string(255)	Card number used for the chargeback's transaction
card_brand	string(255)	Card brand of the card number
customer_email	string(255)	The email of the cardholder
customer_phone	integer	The phone of the cardholder
transaction_type	string(255)	The type of the chargeback's transaction
original_transaction_unique_id	string(255)	The unique id of the chargeback's transaction
arn	string(255)	ARN of the chargeback's transaction

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<chargeback_response>
  <status>error</status>
  <code>470</code>
  <message>Chargeback not found!</message>
  <technical_message>Chargeback by the given criteria cannot be found!</technical_message>
</chargeback_response>
```

In case no chargeback is found for the given ARN or unique ID, a corresponding XML response is as follows:

BY DATE RANGE

Date range based chargeback retrieval allows you to fetch information for all chargebacks for a given merchant within a given date range. Date range searches for chargebacks by their posting date. Search option is chargeback retrieval by their import (creation) date. The response is paginated, each request will return 100 entries max.

The URLs for date range chargeback retrieval are:

Production:

`https://gate.e-comprocessing.net/chargebacks/by_date`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/chargebacks/by_date`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/chargebacks/by_date \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <chargeback_request>
   <start_date>2014-01-01</start_date>
   <end_date>2014-01-31</end_date>
   <externally_processed>external</externally_processed>
   <processing_type>all</processing_type>
   <page>1</page>
 </chargeback_request>'
```

Request Parameters

Parameter	Required	Format	Description
start_date	required	yyyy-mm-dd	start of the requested date range

Parameter	Required	Format	Description
end_date	optional	yyyy-mm-dd	end of the requested date range
import_date	optional	yyyy-mm-dd	date of import in our system. Spans from beggining until end of day.
page	optional	integer	the page within the paginated result, defaults to 1
per_page	optional	integer	Number of entities on page, defaults to 100
externally_processed	optional	string(255)	Filters chargebacks by being externally processed or being native to Genesis. Possible values include 'genesis', 'external', and 'all'. If flag not supplied, it defaults to 'genesis'
processing_type	optional	string(255)	Filters chargebacks by being card present or card not present. Possible values include 'card_present', 'card_not_present', and 'all'. If flag not supplied, it defaults to 'all'.

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<chargeback_responses per_page="100" page="1" total_count="2" pages_count="1">
  <chargeback_response>
    <type>1st Chargeback</type>
    <merchant_number>443344323459841</merchant_number>
    <post_date>2014-01-24</post_date>
    <reason_code>4855</reason_code>
    <reason_description>Non-receipt of merchandise</reason_description>
    <authorization_code>811714</authorization_code>
    <batch_number>2093064</batch_number>
    <cnn>9002578764</cnn>
    <merchant_transaction_reference>b76e9a54bdc99b3</merchant_transaction_reference>
    <capture_method>SET/3D-SET authenticated</capture_method>
    <amount>-14625</amount>
    <currency>USD</currency>
    <chargeback_amount>300.0</chargeback_amount>
    <chargeback_currency>EUR</chargeback_currency>
    <original_transaction_amount>148.0</original_transaction_amount>
    <original_transaction_currency>EUR</original_transaction_currency>
    <merchant_settlement_amount>148.0</merchant_settlement_amount>
    <merchant_settlement_currency>EUR</merchant_settlement_currency>
    <network_settlement_amount>148.0</network_settlement_amount>
    <network_settlement_currency>EUR</network_settlement_currency>
    <merchant_dba_name>hyperstech.com</merchant_dba_name>
    <original_type>Purchase</original_type>
    <original_post_date>2019-06-28</original_post_date>
    <original_transaction_date>2019-06-28</original_transaction_date>
    <original_slip>92572791484</original_slip>
    <item_slip_number>93778283100</item_slip_number>
    <card_number>554960******5069</card_number>
    <card_brand>master</card_brand>
    <customer_email>jonh_doe@example.com</customer_email>
    <customer_phone>3598851248512</customer_phone>
    <transaction_type>sale3d</transaction_type>
    <original_transaction_unique_id>f9634ec5e7dbe6ca3871974accb875cd</original_transaction_unique_id>
    <arn>74537604221431003881865</arn>
  </chargeback_response>
  <chargeback_response>
    <type>2nd Chargeback</type>
    <merchant_number>443344323459841</merchant_number>
    <post_date>2014-01-27</post_date>
    <reason_code>4855</reason_code>
    <reason_description>Non-receipt of merchandise</reason_description>
    <authorization_code>811714</authorization_code>
    <batch_number>2093064</batch_number>
    <cnn>9002578764</cnn>
    <merchant_transaction_reference>b76e9a54bdc99b3</merchant_transaction_reference>
    <capture_method>SET/3D-SET authenticated</capture_method>
    <amount>3456</amount>
    <currency>USD</currency>
    <chargeback_amount>300.0</chargeback_amount>
    <chargeback_currency>EUR</chargeback_currency>
    <original_transaction_amount>148.0</original_transaction_amount>
    <original_transaction_currency>EUR</original_transaction_currency>
    <merchant_settlement_amount>148.0</merchant_settlement_amount>
    <merchant_settlement_currency>EUR</merchant_settlement_currency>
    <network_settlement_amount>148.0</network_settlement_amount>
    <network_settlement_currency>EUR</network_settlement_currency>
    <merchant_dba_name>hyperstech.com</merchant_dba_name>
    <original_type>Purchase</original_type>
    <original_post_date>2019-06-28</original_post_date>
    <original_transaction_date>2019-06-28</original_transaction_date>
    <original_slip>92572791484</original_slip>
    <item_slip_number>93778283100</item_slip_number>
    <card_number>454360******5008</card_number>
    <card_brand>visa</card_brand>
    <customer_email>ivan@example.com</customer_email>
    <customer_phone>3598851248512</customer_phone>
    <transaction_type>sale</transaction_type>
    <original_transaction_unique_id>67fbebc172b743a164a3f3af3d010457</original_transaction_unique_id>
    <arn>74537604221431003881865</arn>
  </chargeback_response>
</chargeback_responses>
```


The attributes in the root node chargeback responses includes information about the pagination of the response.

Successful Response Parameters

Parameter	Type	Description
@per_page	integer	number of entries per page
@page	integer	the current page
@total_count	integer	total number of all entries
@pages_count	integer	total number of pages

CHARGEBACK TYPES

Chargebacks will have one of the following type:

Status	Description

Status	Description
1st Chargeback	The first stage of the dispute procedure raised by the issuer
2nd Chargeback	Second stage of the dispute procedure raised by the issuer (MasterCard only)
1st Chargeback Reversal	When the first chargeback is cancelled (withdrawn) by the issuer
2nd Chargeback Reversal	When the second chargeback is cancelled (withdrawn) by the issuer (MasterCard only)
Transfer Reversal	An operation that sends the amount of the dispute to the merchant when the acquirer represents a chargeback
Re-presentment	Acquirer's defend of the issuer's (first) chargeback
Chargeback Transfer to Merchant Hold Acc	The money is taken from merchant's hold account in Omnipay and is sent to the issuer
Chargeback Transfer to Writeoff Account Acq	The acquirer is taking the loss for this chargeback
Chargeback Transfer to Paymnt Acct Retail	The money is taken from merchant's account in Omnipay and are sent to the issuer (as per the chargeback rules).
Chargeback Transfer to Writeoff SP	The Service Provider is taking the loss for the chargeback.

Retrieval Requests

Retrieval requests are a special type of transactions as they cannot be triggered by the merchant. Retrieval requests occur if the issuer requests additional documentation for a transaction. Retrieval requests do not have financial implication, but they indicate the issuer doubts a given transaction and can initiate a chargeback.

For details, please contact our Risk team.

You can see also see a retrieval request overview in the merchant console under the Risk Management menu.

Retrieval Request notifications

You now have the option to receive API and/or email notifications for each retrieval request event. Enable this feature by emailing the IT Support team atech-support@e-comprocessing.com with the desired notification URL.

The email notifications are sent to the merchant user with role 'admin' which is configured for managing the merchant entity on the gateway platform. The API notifications are equal to Notification for asynchronous payments, please refer to the section Notification for asynchronous payments to understand how notifications work.

Retrieval Notification Example

```
?transaction_id=30450
&terminal_token=cd577214de104fa0dd9c28486b3c817fd08c89a6
&unique_id=5de39380bf7ac7e1fc31cbd7805dc0ec
&transaction_type=sale
&status=chargebacked
&signature=98676c91391094b823d1f521d06cc129195952f9
&amount=400
&currency=USD
&avs_response_code=5I
&avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&cvv_result_code=M
&reason_code=10
&reason_description=Dispute+Transaction
&post_date=2014-07-16
&arn=17b4646c093b025
&event=retrieval_request
```

Retrieval Request API

The retrieval request API can be used to get info for retrieval requests.

Single Retrieval Request

Single retrieval request retrieval allows to get a certain retrieval request by its ARN or by passing the unique ID of the original transaction.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/retrieval_equests \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <retrieval_request_request>
    <arn>74537604221431003881865</arn>
  </retrieval_request_request>'
```

OR

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/retrieval_equests \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <retrieval_request_request>
    <original_transaction_unique_id>53b1f5eacc9e4d3a3afebb4e993fe962</original_transaction_unique_id>
  </retrieval_request_request>'
```

List of Retrieval Request

Retrieve a list of retrieval requests by ARN or by passing the unique ID of the original transaction.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/retrieval_equests \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <retrieval_request_request>
    <arn>74537604221431003881865</arn>
    <retrieval_request_request>all</retrieval_request_request>
  </retrieval_request_request>'
```

OR

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/retrieval_equests \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <retrieval_request_request>
    <original_transaction_unique_id>53b1f5eacc9e4d3a3afebb4e993fe962</original_transaction_unique_id>
    <mode>list</mode>
  </retrieval_request_request>'
```

The URLs for the single and list of retrieval requests API are:

Production:

`https://gate.e-comprocessing.net/retrieval_equests`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/retrieval_requests`

Successful Response

```
stdClass Object
(
    [type] => Retrieval request
    [arn] => 74537604221431003881865
    [post_date] => 2014-01-24
    [reason_code] => 42
    [reason_description] => Cardholder request
    [authorization_code] => 811714
    [merchant_number] => 124000000006698
    [issuer_number] => 0000002884
    [item_slip_number] => 93778283100
    [original_type] => Purchase
    [original_slip] => 92572791484
    [original_batch_number] => 2093064
    [description] => Action Control ID=20140224019152
    [fulfillment_date] => 2019-06-28
    [original_post_date] => 2019-06-28
    [original_transaction_date] => 2019-06-28
    [original_transaction_amount] => 148.0
    [original_transaction_currency] => EUR
    [merchant_settlement_amount] => 148.0
    [merchant_settlement_currency] => EUR
    [network_settlement_amount] => 148.0
    [network_settlement_currency] => EUR
    [card_number] => 554960******5069
    [card_brand] => master
    [customer_email] => jonh_doe@example.com
    [customer_phone] => 3598851248512
    [transaction_type] => sale3d
    [original_transaction_unique_id] => f9634ec5e7dbe6ca3871974accb875cd
    [arn] => 74537604221431003881865
)
```

```
<payment_response content=[
    <type content=[Retrieval request]>
    <arn content=[74537604221431003881865]>
    <post_date content=[2014-01-24]>
    <reason_code content=[42]>
    <reason_description content=[Cardholder request]>
    <authorization_code content=[811714]>
    <merchant_number content=[124000000006698]>
    <issuer_number content=[0000002884]>
    <item_slip_number content=[93778283100]>
    <original_type content=[Purchase]>
    <original_slip content=[92572791484]>
    <original_batch_number content=[2093064]>
    <description content=[Action Control ID=20140224019152]>
    <fulfillment_date content=[2019-06-28]>
    <original_post_date content=[2019-06-28]>
    <original_transaction_date content=[2019-06-28]>
    <original_transaction_amount content=[148.0]>
    <original_transaction_currency content=[EUR]>
    <merchant_settlement_amount content=[148.0]>
    <merchant_settlement_currency content=[EUR]>
    <network_settlement_amount content=[148.0]>
    <network_settlement_currency content=[EUR]>
    <card_number content=[554960******5069]>
    <card_brand content=[master]>
    <customer_email content=[jonh_doe@example.com]>
    <customer_phone content=[3598851248512]>
    <transaction_type content=[sale3d]>
    <original_transaction_unique_id content=[f9634ec5e7dbe6ca3871974accb875cd]>
    <arn content=[74537604221431003881865]>
]>
```

```
{
    type: "Retrieval request",
    arn: "74537604221431003881865",
    post_date: "2014-01-24",
    reason_code: "42",
    reason_description: "Cardholder request",
    authorization_code: "811714",
    merchant_number: "124000000006698",
    issuer_number: "0000002884",
    item_slip_number: "93778283100",
    original_type: "Purchase",
    original_slip: "92572791484",
    original_batch_number: "2093064",
    description: "Action Control ID=20140224019152",
    fulfillment_date: "2019-06-28",
    original_post_date: "2019-06-28",
    original_transaction_date: "2019-06-28",
    original_transaction_amount: "148.0",
    original_transaction_currency: "EUR",
    merchant_settlement_amount: "148.0",
    merchant_settlement_currency: "EUR",
    network_settlement_amount: "148.0",
    network_settlement_currency: "EUR",
    card_number: "554960******5069",
    card_brand: "master",
    customer_email: "jonh_doe@example.com",
    customer_phone: "3598851248512",
    transaction_type: "sale3d",
    original_transaction_unique_id: "f9634ec5e7dbe6ca3871974accb875cd",
    arn: "74537604221431003881865",
}
```



```
<?xml version="1.0" encoding="UTF-8"?>
<retrieval_request_response>
  <type>Retrieval request</type>
  <arn>74537604221431003881865</arn>
  <post_date>2014-01-24</post_date>
  <reason_code>42</reason_code>
  <reason_description>Cardholder request</reason_description>
  <authorization_code>811714</authorization_code>
  <merchant_number>124000000006698</merchant_number>
  <issuer_number>0000002884</issuer_number>
  <item_slip_number>93778283100</item_slip_number>
  <original_type>Purchase</original_type>
  <original_slip>92572791484</original_slip>
  <original_batch_number>2093064</original_batch_number>
  <description>Action Control ID=20140224019152</description>
  <fulfillment_date>2019-06-28</fulfillment_date>
  <original_post_date>2019-06-28</original_post_date>
  <original_transaction_date>2019-06-28</original_transaction_date>
  <original_transaction_amount>148.0</original_transaction_amount>
  <original_transaction_currency>EUR</original_transaction_currency>
  <merchant_settlement_amount>148.0</merchant_settlement_amount>
  <merchant_settlement_currency>EUR</merchant_settlement_currency>
  <network_settlement_amount>148.0</network_settlement_amount>
  <network_settlement_currency>EUR</network_settlement_currency>
  <card_number>554960******5069</card_number>
  <card_brand>master</card_brand>
  <customer_email>jonh_doe@example.com</customer_email>
  <customer_phone>3598851248512</customer_phone>
  <transaction_type>sale3d</transaction_type>
  <original_transaction_unique_id>f9634ec5e7dbe6ca3871974accb875cd</original_transaction_unique_id>
</retrieval_request_response>
```


Successful Response Parameters

Parameter	Type	Description
type	string(255)	The retrieval request type. See retrieval request types for details
arn	string(255)	ARN of the retrieval request's transaction
post_date	string(255)	The date of the retrieval request
reason_code	string(255)	Reason code of the retrieval request
reason_description	string(255)	Reason description of the retrieval request
authorization_code	string(255)	Authorization code of the retrieval request's transaction
merchant_number	string(20)	Merchant number
issuer_number	string(14)	Issuer reference number for the retrieval request
item_slip_number	string(11)	OmniPay internal slip number of the original presentment
original_type	string(28)	Transaction type of the original presentment
original_slip	string(11)	OmniPay internal slip number of the original presentment
original_batch_number	string(23)	The batch number is provided by the submitter of the original presentment

Parameter	Type	Description
description	string(255)	Free-text note entered by the institution and associated with the fulfilment
fulfillment_date	date(8)	Date on which the retrieval request was fulfilled. Empty if not yet fulfilled
original_post_date	date(8)	Original presentment posting date
original_transaction_date	date(8)	Transaction date of the original presentment
original_transaction_amount	float	Amount of the original presentment in major currency unit, seeCurrency and Amount Handling for details.
original_transaction_currency	string(3)	Transaction currency of the original presentment
merchant_settlement_amount	float	Amount settled with the merchant for the original presentment (that is, the amount posted to the merchant account) in major currency unit, before the deduction of any charges, see Currency and Amount Handling for details.
merchant_settlement_currency	string(3)	Currency settled with the payment network for the presentment before the deduction of any charges.
network_settlement_amount	float	Amount settled with the merchant for the original presentment (that is, the amount posted to the merchant account) in major currency unit, before the deduction of any charges, see Currency and Amount Handling for details.
network_settlement_currency	string(3)	Currency settled with the payment network for the presentment before the deduction of any charges.
card_number	string(255)	Card number used for the retrieval request's transaction
card_brand	string(255)	Card brand of the card number
customer_email	string(255)	The email of the cardholder
customer_phone	integer	The phone of the cardholder
transaction_type	string(255)	The type of the retrieval request's transaction
original_transaction_unique_id	string(255)	The unique id of the retrieval request's transaction
arn	string(255)	ARN of the retrieval request's transaction

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<retrieval_request_response>
  <status>error</status>
  <code>480</code>
  <message>Retrieval request not found!</message>
  <technical_message>Retrieval request by the given criteria cannot be found!</technical_message>
</retrieval_request_response>
```

In case no retrieval request is found with the given ARN or unique ID, a corresponding XML error response is received.

By date range

Date range based retrieval request retrieval allows you to fetch information for all retrieval requests for a given merchant within a given date range. Date range searches for retrieval requests by their posting date. The response is paginated, each request will return 100 entries max.

The URLs for date range retrieval request retrieval are:

Production:

`https://gate.e-comprocessing.net/retrieval_requests/by_date`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/retrieval_requests/by_date`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/retrieval_requests/by_date \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <retrieval_request_request>
    <start_date>2014-01-01</start_date>
    <end_date>2014-01-31</end_date>
    <page>1</page>
  </retrieval_request_request>'
```

Request Parameters

Parameter	Required	Format	Description
start_date	required	yyyy-mm-dd	start of the requested date range
end_date	optional	yyyy-mm-dd	end of the requested date range
import_date	optional	yyyy-mm-dd	date of import in our system. Spans from beggining until end of day.
page	optional	integer	the page within the paginated result, defaults to 1
per_page	optional	integer	Number of entities on page, defaults to 100
externally_processed	optional	string(255)	Filters retrieval requests by being externally processed or being native to Genesis. Possible values include 'genesis', 'external', and 'all'. If flag not supplied, it defaults to 'genesis'
processing_type	optional	string(255)	Filters retrieval requests by being card present or card not present. Possible values include 'card_present', 'card_not_present', and 'all'. If flag not supplied, it defaults to 'all'.

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<retrieval_request_responses per_page="100" page="1" total_count="2" pages_count="1">
  <retrieval_request_response>
    <type>Retrieval request</type>
    <post_date>2014-01-24</post_date>
    <reason_code>42</reason_code>
    <reason_description>Cardholder request</reason_description>
    <authorization_code>811714</authorization_code>
    <merchant_number>1240000000006698</merchant_number>
    <issuer_number>0000002884</issuer_number>
    <item_slip_number>93778283100</item_slip_number>
    <original_type>Purchase</original_type>
    <original_slip>92572791484</original_slip>
    <original_batch_number>2093064</original_batch_number>
    <description>Action Control ID=20140224019152</description>
    <fulfillment_date>2019-06-28</fulfillment_date>
    <original_post_date>2019-06-28</original_post_date>
    <original_transaction_date>2019-06-28</original_transaction_date>
    <original_transaction_amount>148.0</original_transaction_amount>
    <original_transaction_currency>EUR</original_transaction_currency>
    <merchant_settlement_amount>148.0</merchant_settlement_amount>
    <merchant_settlement_currency>EUR</merchant_settlement_currency>
    <network_settlement_amount>148.0</network_settlement_amount>
    <network_settlement_currency>EUR</network_settlement_currency>
    <card_number>554960******5069</card_number>
    <card_brand>master</card_brand>
    <customer_email>jonh_doe@example.com</customer_email>
    <customer_phone>3598851248512</customer_phone>
    <transaction_type>sale3d</transaction_type>
    <original_transaction_unique_id>f9634ec5e7dbe6ca3871974accb875cd</original_transaction_unique_id>
    <arn>74537604221431003881865</arn>
  </retrieval_request_response>
  <retrieval_request_response>
    <type>Retrieval request</type>
    <post_date>2014-01-27</post_date>
    <reason_code>42</reason_code>
    <reason_description>Cardholder request</reason_description>
    <authorization_code>811714</authorization_code>
    <merchant_number>1240000000006698</merchant_number>
    <issuer_number>0000002884</issuer_number>
    <item_slip_number>93778283100</item_slip_number>
    <original_type>Purchase</original_type>
    <original_slip>92572791484</original_slip>
    <original_batch_number>2093064</original_batch_number>
    <description>Action Control ID=20140224019152</description>
    <fulfillment_date>2019-06-28</fulfillment_date>
    <original_post_date>2019-06-28</original_post_date>
    <original_transaction_date>2019-06-28</original_transaction_date>
    <original_transaction_amount>148.0</original_transaction_amount>
    <original_transaction_currency>EUR</original_transaction_currency>
    <merchant_settlement_amount>148.0</merchant_settlement_amount>
    <merchant_settlement_currency>EUR</merchant_settlement_currency>
    <network_settlement_amount>148.0</network_settlement_amount>
    <network_settlement_currency>EUR</network_settlement_currency>
    <card_number>454360******5008</card_number>
    <card_brand>visa</card_brand>
    <customer_email>ivan@example.net</customer_email>
    <customer_phone>3598851248512</customer_phone>
    <transaction_type>sale</transaction_type>
    <original_transaction_unique_id>67fbebc172b743a164a3f3af3d010457</original_transaction_unique_id>
    <arn>74537604221431003881865</arn>
  </retrieval_request_response>
</retrieval_request_responses>
```


The attributes in the root node **retrieval_request_responses** includes information about the pagination of the response.

Successful Response Parameters

Parameter	Type	Description
@per_page	integer	number of entries per page
@page	integer	the current page
@total_count	integer	total number of all entries
@pages_count	integer	total number of pages

Funding Accounts

Funding Accounts API

The Funding Accounts API can be used to retrieve data for funding accounts.

BY POST DATE

Fetch merchant related funding accounts by post date.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/funding_accounts/by_post_date \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <funding_accounts_request>
   <start_date>2020-01-01</start_date>
   <end_date>2020-01-31</end_date>
   <externally_processed>external</externally_processed>
   <processing_type>all</processing_type>
   <page>1</page>
   <per_page>50</per_page>
 </funding_accounts_request>'
```

Request Parameters

Parameter	Required	Format	Description
start_date	required	yyyy-mm-dd	Start of the requested post date range
end_date	optional	yyyy-mm-dd	End of the requested post date range
page	optional	integer	The page within the paginated result, defaults to 1
per_page	optional	integer	Number of entities on page, defaults to 100
externally_processed	optional	string(255)	Filters transactions by being externally processed or being native to Genesis. Possible values include 'genesis', 'external', and 'all'. If flag not supplied, it defaults to 'genesis'
processing_type	optional	string(255)	Filters transactions by being card present or card not present. Possible values include 'card_present', 'card_not_present', and 'all'. If flag not supplied, it defaults to 'all'.

`required* = conditionally required`

The URLs for the funding accounts API are:

Production:

`https://gate.e-comprocessing.net/funding_accounts/by_post_date`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/funding_accounts/by_post_date`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<funding_accounts_responses>
  <funding_account_response>
    <merchant_number>505702571465826</merchant_number>
    <account_number>123445</account_number>
    <account_type>Merchant Account</account_type>
    <post_date>2020-01-02</post_date>
    <transaction_type>Funding</transaction_type>
    <slips>2</slips>
    <reference_number>60506291293</reference_number>
    <reversal_indicator>N</reversal_indicator>
    <currency>USD</currency>
    <amount>10.00</amount>
    <account_amount_gross>100.00</account_amount_gross>
    <account_total_charges>0.00</account_total_charges>
    <account_amount_net>100.00</account_amount_net>
    <card_brand>visa</card_brand>
    <batch_number>ERV</batch_number>
    <value_date>2019-12-12</value_date>
    <transaction_category>Charges &amp;amp; fees</transaction_category>
    <local_currency>USD</local_currency>
    <local_amount_gross>10.00</local_amount_gross>
    <account_currency>USD</account_currency>
  </funding_account_response>
</funding_accounts_responses>
```


Successful Response Parameters

Parameter	Type	Description
merchant_number	string(20)	Merchant number.
account_number	string(11)	OmniPay Unique Identifier for the Merchant account.
account_type	string(20)	The Type of the Account.
post_date	string(255)	The posting date on which the item in question was posted to the account.
transaction_type	string(65)	Transaction type description. For adjustment transactions this may include some explanatory text.
slips	string(10)	The number of internal slip numbers covered by the item.
reference_number	string(11)	This is a Slip Number in the OmniPay system for the transaction.
reversal_indicator	string(1)	Reversal Indicator Y if this is a reversal else N.
currency	string(3)	Swift code for the transaction currency of the item in question.
amount	float	Transaction amount of the item in major currency unit, see Currency and Amount Handling for details.
account_amount_gross	float(18,2)	The gross amount posted to the account, in the account currency rounded to 2 decimal places, see Currency and Amount Handling for details.
account_total_charges	float(18,2)	Applicable charges for the item, expressed in the account currency rounded to 2 decimals places, see Currency and Amount Handling for details.
account_amount_net	float(18,2)	The net amount in the account currency, after taking into account any charges rounded to 2 decimal places, see Currency and Amount Handling for details.
card_brand	string(16)	The card scheme associated to the transaction. Can be empty.
batch_number	string(23)	The 80byte batch number used to submit the transaction. This is only available for Transaction Types: -Merchant Purchase Deposits. -Merchant Debits.
arn	string(23)	Acquirer Reference Number. This is only available for the transaction Type: 'Chargeback'.
addendum_acquirer_reference	string(25)	ARN created by transferring a transaction or by Misc Batch Input.
fee_sequence	string(3)	Fee Sequence Code for a transaction. Usually provided for adjustment transaction in general it is empty.
fee_description	string(19)	Fee Sequence Description per Fee Sequence Code.
funding_date	string(255)	Associated Funding Date, only relevant for transactions whose category is 008 - Payments.
value_date	string(255)	Value Date.
transaction_category_code	string(3)	Transaction Category Code.
transaction_category	string(32)	Description for the transaction category code.
client_number	string(8)	This is the OmniPay Client Number and is the link to the MP feed.
payment_status	string(70)	The field will only be filled for payments if the institution uses the funding warehouse functionality. It will be empty for other transactions.
bank_reference	string(20)	This field is filled only for specific institutions on payment transactions.
account_type_code	string(3)	Account Type Code.
related_slip	string(11)	This field has details of a related transaction. Depending of the transaction type this could be a link to another transaction within the FA feed (Ref_no field) or a TR (Item_no field) or a PB (BTCH_SLIP field).

Parameter	Type	Description
transaction_type_code	string(3)	Transaction type code.
local_currency	string(3)	Swift code of the local currency.
local_amount_gross	string(21)	The gross amount posted to the account, in the local currency, seeCurrency and Amount Handling for details.
account_currency	string(3)	Account Currency.

Invalid End Date

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/funding_accounts/by_post_date \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <funding_accounts_request>
   <start_date>2020-01-01</start_date>
   <end_date>13-2020</end_date>
 </funding_accounts_request>'
```

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
 <?xml version="1.0" encoding="UTF-8"?>
 <funding_accounts_response>
   <status>error</status>
   <code>340</code>
   <message>Please check input data for errors!</message>
   <technical_message>input_error: 'end_date' has invalid format</technical_message>
 </funding_accounts_response>
```

Fraud reports

SAFE/TC40 reports contain information for transactions reported as fraud to MasterCard or VISA.

You can see a SAFE/TC40 reports overview in the merchant console under the Risk management menu.

SAFE/TC40 API

The SAFE/TC40 API can be used to retrieve data about SAFE/TC40 reports.

Single SAFE/TC40 report

Single SAFE/TC40 retrieval allows to get a certain SAFE/TC40 by its ARN or by passing the unique ID of the original transaction.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/fraud_reports \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <fraud_report_request>
    <arn>74537604221431003881865</arn>
  </fraud_report_request>'
```

OR

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/fraud_reports \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <fraud_report_request>
    <original_transaction_unique_id>53b1f5eacc9e4d3a3afebb4e993fe962</original_transaction_unique_id>
  </fraud_report_request>'
```

List of SAFE/TC40 report

Retrieve a list of SAFE/TC40 by ARN or by passing the unique ID of the original transaction.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/fraud_reports \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <fraud_report_request>
    <fraud_report_request>arn,</fraud_report_request>
    <mode>list</mode>
  </fraud_report_request>'
```

OR

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/fraud_reports \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <fraud_report_request>
    <original_transaction_unique_id>53b1f5eacc9e4d3a3afebb4e993fe962</original_transaction_unique_id>
    <mode>list</mode>
  </fraud_report_request>'
```

The URLs for the single and list of SAFE/TC40 API are:

Production:

`https://gate.e-comprocessing.net/fraud_reports`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/fraud_reports`

Successful Response

```
stdClass Object
(
    [transaction_date] => 2014-01-24
    [fraud_type_code] => 6
    [amount] => 400
    [currency] => GBP
    [card_number] => 554960******5069
    [card_brand] => master
    [customer_email] => jonh_doe@example.com
    [customer_phone] => 3598851248512
    [transaction_type] => sale3d
    [original_merchant_transaction_id] => 123294sss
    [original_transaction_unique_id] => f9634ec5e7dbe6ca3871974accb875cd
    [arn] => 74537604221431003881865
)
```

```
<payment_response content=[
    <transaction_date content=[2014-01-24]>
    <fraud_type_code content=[6]>
    <amount content=[400]>
    <currency content=[GBP]>
    <card_number content=[554960******5069]>
    <card_brand content=[master]>
    <customer_email content=[jonh_doe@example.com]>
    <customer_phone content=[3598851248512]>
    <transaction_type content=[sale3d]>
    <original_merchant_transaction_id content=[123294sss]>
    <original_transaction_unique_id content=[f9634ec5e7dbe6ca3871974accb875cd]>
    <arn content=[74537604221431003881865]>
]>
```

```
{
    transaction_date: "2014-01-24",
    fraud_type_code: "6",
    amount: "400",
    currency: "GBP",
    card_number: "554960******5069",
    card_brand: "master",
    customer_email: "jonh_doe@example.com",
    customer_phone: "3598851248512",
    transaction_type: "sale3d",
    original_merchant_transaction_id: "123294sss",
    original_transaction_unique_id: "f9634ec5e7dbe6ca3871974accb875cd",
    arn: "74537604221431003881865",
}
```

```
  <?xml version="1.0" encoding="UTF-8"?>
  <fraud_report_response>
    <transaction_date>2014-01-24</transaction_date>
    <fraud_type_code>6</fraud_type_code>
    <amount>400</amount>
    <currency>GBP</currency>
    <card_number>554960******5069</card_number>
    <card_brand>master</card_brand>
    <customer_email>jonh_doe@example.com</customer_email>
    <customer_phone>3598851248512</customer_phone>
    <transaction_type>sale3d</transaction_type>
    <original_merchant_transaction_id>123294sss</original_merchant_transaction_id>
    <original_transaction_unique_id>f9634ec5e7dbe6ca3871974accb875cd</original_transaction_unique_id>
    <arn>74537604221431003881865</arn>
  </fraud_report_response>
```

Successful Response Parameters

Parameter	Type	Description

Parameter	Type	Description
transaction_date	yyyy-mm-dd	The date transaction is made
fraud_type_code	string(2)	0 = Lost; 1 = Stolen; 2 = Card not received as issued (NRI); 3 = Fraudulent application; 4 = Issuer-reported counterfeit; 5 = Miscellaneous/Account takeover; 6 = Fraudulent use of account number; 7 = (U.S. only) used by ICS; 8 = (U.S. only) used by ICS; 9 = Acquirer-reported counterfeit
amount	integer	Amount in minor units in cardholder account currency. Amount can be negative for: 1st chargeback, 2nd chargeback, transfer reversal and positive for all other types.
currency	string(3)	Currency of the cardholder account. See ISO 4217
card_number	string(255)	Card number used for the chargeback's transaction
card_brand	string(255)	Card brand of the card number
customer_email	string(255)	The email of the cardholder
customer_phone	integer	The phone of the cardholder
transaction_type	string(255)	The type of the chargeback's transaction
original_merchant_transaction_id	string(255)	Merchant reference id
original_transaction_unique_id	string(255)	The unique id of the chargeback's transaction
arn	string(255)	ARN of the chargeback's transaction

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<fraud_report_response>
  <status>error</status>
  <code>490</code>
  <message>Mastercard Fraud Report not found!</message>
  <technical_message>Mastercard fraud report by the given criteria cannot be found!</technical_message>
</fraud_report_response>
```

In case no SAFE/TC40 is found for the given ARN or unique ID, a corresponding XML response is as follows:

By date range

Date range based SAFE/TC40 retrieval allows you to fetch information for all SAFE/TC40 reports for a given merchant within a given date range. Date range searches for SAFE/TC40 reports by their posting date. Search option is SAFE/TC40 retrieval by their import (creation) date. The response is paginated, each request will return 100 entries max.

The URLs for date range SAFE/TC40 retrieval are:

Production:

`https://gate.e-comprocessing.net/fraud_reports/by_date`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/fraud_reports/by_date`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/fraud_reports/by_date \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <fraud_report_request>
   <start_date>2014-01-01</start_date>
   <end_date>2014-01-31</end_date>
   <page>1</page>
 </fraud_report_request>'
```

Request Parameters

Parameter	Required	Format	Description
start_date	required	yyyy-mm-dd	start of the requested date range
end_date	optional	yyyy-mm-dd	end of the requested date range
import_date	optional	yyyy-mm-dd	date of import in our system. Spans from beggining until end of day.
page	optional	integer	the page within the paginated result, defaults to 1
per_page	optional	integer	Number of entities on page, defaults to 100

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<fraud_report_responses per_page="100" page="1" total_count="2" pages_count="1">
  <fraud_report_response>
    <transaction_date>2014-01-24</transaction_date>
    <fraud_type_code>6</fraud_type_code>
    <amount>400</amount>
    <currency>GBP</currency>
    <card_number>554960******5069</card_number>
    <card_brand>master</card_brand>
    <customer_email>jonh_doe@example.com</customer_email>
    <customer_phone>3598851248512</customer_phone>
    <transaction_type>sale3d</transaction_type>
    <original_merchant_transaction_id>123294sss</original_merchant_transaction_id>
    <original_transaction_unique_id>f9634ec5e7dbe6ca3871974accb875cd</original_transaction_unique_id>
    <arn>74537604221431003881865</arn>
  </fraud_report_response>
  <fraud_report_response>
    <transaction_date>2014-01-27</transaction_date>
    <fraud_type_code>6</fraud_type_code>
    <amount>350</amount>
    <currency>GBP</currency>
    <card_number>454360******5008</card_number>
    <card_brand>visa</card_brand>
    <customer_email>peter@example.net</customer_email>
    <customer_phone>3598851248512</customer_phone>
    <transaction_type>sale</transaction_type>
    <original_merchant_transaction_id>123294sss</original_merchant_transaction_id>
    <original_transaction_unique_id>67fbebc172b743a164a3f3af3d010457</original_transaction_unique_id>
    <arn>74537604221431003881865</arn>
  </fraud_report_response>
</fraud_report_responses>
```

The attributes in the root node mastercard fraud report responses includes information about the pagination of the response.

Successful Response Parameters

Parameter	Type	Description
@per_page	integer	number of entries per page
@page	integer	the current page
@total_count	integer	total number of all entries
@pages_count	integer	total number of pages

Blacklists

With the Blacklist API you can check if a certain credit card is blacklisted within the gateway. If a terminal token is not passed, the merchant and global PAN blacklists will be checked for the given card number. If a terminal token is passed, the terminal, its merchant, and the global PAN blacklists will be checked for blacklist matches.

The URLs for the Blacklist API are:

Production: `https://gate.e-comprocessing.net/blacklists`

Staging (for integration): `https://staging.gate.e-comprocessing.net/blacklists`

Invoking a Request

A transaction is invoked via HTTPS POST, parameters are passed as XML with UTF-8 encoding.

```
<?xml version="1.0" encoding="UTF-8"?>
<blacklist_request>
  <card_number>4200000000000000</card_number>
  <terminal_token>abd30ed00f88f838c5d233cbb62b6da0b69267b4</terminal_token>
</blacklist_request>
```

Parameter	Required	Format	Description
card_number	required	int(13..16)	the credit card number to be checked
terminal_token	optional	string(40)	the terminal token

Response

Successful response:

```
<?xml version="1.0" encoding="UTF-8"?>
<blacklist_response>
  <blacklisted>true</blacklisted>
</blacklist_response>
```

Name	Type	Description
blacklisted	boolean	credit card number is blacklisted or not

Error response:

```
<?xml version="1.0" encoding="UTF-8"?>
<blacklist_response>
  <code>350</code>
  <message>Invalid XML: No close tag for /blacklist_request</message>
</blacklist_response>
```

Name	Type	Description
code	integer	error code of the error that occurred
message	string	info about the error

Asynchronous Transactions and Notifications

Asynchronous Transactions

3-D secure transactions are always processed **asynchronously**, while the other transactions are processed **synchronously**.

This means that the final result of the transaction will not be available immediately and the status is pending async. Once the transaction has reached a final status, a Notification is sent to the merchant.

> Whenever the status is **pending_async** the transaction gets processed asynchronously, and a Notification is sent to the merchant once the transaction has reached final state.

Overview

Transaction type	async?
Authorize	never
Authorize3d	always
Sale	never
Sale3d	always
Capture	never
Refund	never
Async Refund	always
Void	never
InitRecurringSale	never
InitRecurringSale3D	always
RecurringSale	never
Credit	never
BitPay Sale	always
BitPay Refund	always

Notifications

For asynchronous payments a notification is always sent to the **notification_url** within the payment transaction.

The payment gateway can be configured to also send a notification after each synchronous payment transaction. The notification is sent to the **notification_url** which is configured per merchant.

Also see 3-D Secure Transactions and Notification for asynchronous payments.

The format of the notification in both cases is the same.

Notification Example

```
?transaction_id=82803B4C-70CC-43BD-8B21-FD0395285B40
&unique_id=44177a21403427eb96664a6d7e5d5d48
&transaction_type=sale3d
&terminal_token=394f2ebc3646d3c017fa1e1cbc4a1e20
&status=approved
&amount=500
&signature=088e16a1019277b15d58faf0541e11910eb756f6
&consumer_id=123456
&token=ee946db8-d7db-4bb7-b608-b65b153e127d
&eci=05
&avs_response_code=5I
&avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&cvv_result_code=M
```

Parameters

Name	Type	Description
transaction_id	string	merchant generated transaction id
unique_id	string	unique id generated by Genesis
transaction_type	string	transaction type for the transaction eg: sale3d
terminal_token	string	the terminal token as used in the processing url
status	string	status of the payment transaction
amount	string	amount of the payment transaction. If the transaction is partially approved, this is the partially approved amount. Check Partial Approvals for details
partial_approval	string	If the transaction is partially approved, this is set to 'true'. Check Partial Approvals for details
signature	string	the signature of the notification, should be used to verify the notification was sent by Genesis
consumer_id	string(10)	Consumer unique reference. See Consumers
token	string(36)	Plain-text token value. See Tokenize
eci	string	See Electronic Commerce Indicator as returned from the MPI for details

Name	Type	Description
event	string	The event that caused the notification
rc_code	string	The reason code for the event
rc_description	string	The reason description for the event
avs_response_code	string	Generated by the card network on trying to match the billing ad- dress when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string	Card Verification Value response code. Optional, returned only if acquirer supports it.
reference_transaction_unique_id	string	The unique id generated by Genesis, identifies the reference transaction if present.
authorization code	string	A code returned by some acquirers to indicate that a card payment has been authorized.
retrieval_reference_number	string	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
threeds_authentication_flow	string	Identifies the concrete 3DS authentication flow that the transaction has gone through. It will be available in the notification only if the consumer has finished the 3DS authentication with the issuer. The value for 3DSv1 will be payer_authentication. The available values for 3DSv2 are frictionless, challenge and fallback.
threeds_method_status	string	Identifies the status of the 3DS-Method in the scope of 3DSv2 authentication protocol. The possible values are **required**, **in_progress** and **completed**. For more details about the 3DS-Method submission, go to the 3DSv2 authentication flows.
threeds_target_protocol_version	string(1)	Identifies the 3DS protocol that has been enforced. The possible values are **1**, **2**. In case it's **2**, you are integrated with the 3DSv2 authentication protocol, otherwise with 3DSv1.
threeds_concrete_protocol_version	string(1)	Identifies the concrete 3DS protocol version that the transaction has gone through. The possible values are **1**, **2**. The value will be **1** in case of 3DSv1 authentication protocol used or a fallback from 3DSv2 to 3DSv1 has happened

Please, be advised that the **threeds_method_status** will be available only in the scope of 3DSv2 and if only the ACS Provider has requested a 3DS-Method to be submitted. For more information about the available 3DSv2 authentication flows with or without 3DS-Method, go to the 3DSv2 authentication flows.

For more information about the 3DS notification params and notification examples, go to the **Notification** section for each of the 3DSv2 authentication flows.

Status will be either "declined", "approved" or "error", like shown in the states table.

The event parameter is added only for fraud transactions eg: chargeback, chargeback_reversal, representment, second_chargeback or retrieval_request.

The signature is a mean of security to ensure that the gate is really the sender of the notification. It is generated by concatenating the unique id of the transaction with your API password and generating a SHA1 Hash (Hex) of the string:

```
SHA1 Hash Hex of <unique_id><Your API password>
```

Notification signature examples

unique_id	API password	signature
fc6c3c8c0219730c7a099eaa540f70dc	bogus	08d01ae1ebdc22b6a1a764257819bb26e9e94e8d
130319cfb3bf65ff3c4a4045487b173e	test123	1b34dabed996788efcc049567809484454ee8b17

You can use the signature to verify the integrity of the notification, ensuring that it was really sent by the gate.

You must either use the signature to verify the notification's integrity or make a reconcile to check the final transaction status.

```
<?xml version="1.0" encoding="UTF-8"?>
<notification_echo>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
</notification_echo>
```

When receiving the notification, you are required to render an xml page containing the transaction's unique id so that the gateway knows that you have accepted the notification. If the XML is not delivered, the notification is sent periodically until the XML is received.

WPF

The WPF (Web Payment Form) is a customizable component of the Genesis payment gateway. It provides merchants with an intuitive user interface to easily process their customers' payments. Through a single point of integration, the merchant can offer his customers multiple payment methods instantly and since the WPF is hosted on the secure Genesis infrastructure, it is already PCI-DSS compliant.

Workflow

In the example above the customer visits the merchant's website and does a checkout.

(1), the merchant initiates the payment on the Genesis payment gateway through a request to theWPF API, which carries the mandatory, initial payload (e.g. amount, currency, etc.). The response to this request (if successful) is a redirect URL, which the merchants hands over to the customer. Following this redirect URL

(2), the customer is then directed to the actual payment form (WPF), which gets served from the Genesis servers. Because the merchant has previously transmitted most of the relevant payment information, the form is prefilled with these values and the customer only needs to add personal data. The customer then selects one of the payment methods offered by the merchant and fills in his payment information

(3) (e.g. credit card data). Upon completion the customer is redirected back to the merchant

(4)[1]. After the payment has been processed and reached a final state the merchant is sent a notification

(5) to the notification url supplied in the initial create request (1). The merchant must either use the notification's signature to verify the payment's integrity or make a reconcile

(6) to check the final payment status. However, we urge all merchants to always do a reconcile.

`1 - Particularly to the return success url defined by the merchant in his initial request. If the customer has selected an asynchronous payment method, he is redirected to the MPI provider before this step`

> 3D secure WPF payments are always performed asynchronously. After submitting the web payment form, the customer is redirected to the MPI provider to enter his personal data. In the case when cardholder is not enrolled customer is redirected to the failure url.
>
> As with all other asynchronous payment transactions, the return-, success- and cancel-URLs are only meant to display a useful page/message to the customer. A redirect of the customer to one of these URLs never gives any form of indication of the payment's state. To find out whether the payment has gone through or not the merchant must always wait for the notification or (even better) do a reconcile.
>
> Please also note that there is no specific order in which notification and redirect will occur (that means that the notification may also arrive before the customer's redirect).

WPF API

URLS

Create:

The URL for the WPF API create method is:

`https://wpf.e-comprocessing.net/<locale>/wpf`

For the test system the URL is:

`https://staging.wpf.e-comprocessing.net/<locale>/wpf`

Note that if you do not submit one of the available locales, defaults to 'en' (English).

Check the WPF Internationalization (i18n) for details.

Reconcile:

The URL for the WPF API reconcile method is:

`https://wpf.e-comprocessing.net/wpf/reconcile`

For the test system the URL is:

`https://staging.wpf.e-comprocessing.net/wpf/reconcile`

CREATE

Web Payment Form API supports the 3DSv2 authentication protocol for the following transaction typesAuthorize3d Sale3d InitRecurringSale3d. For more information, please check the request parameters below and request examples on the right.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('WPF\Create');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setDescription('You are about to buy 3 shoes at www.shoes.com!')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnCancelUrl('http://www.example.com/cancel.html')
        ->setReturnPendingUrl('http://www.example.com/payment-pending.html')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerId('123456')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')
        ->setRememberCard('true')
        ->setLifetime('60')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // Risk Params
        ->setRiskUserId('123456')


        // Transaction Types
        ->addTransactionType('authorize')
        ->addTransactionType('sale')
        ->setPayLater('true')


        // Reminders
        ->addReminder('email', '40')
        ->addReminder('sms', '10');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.wpf.WPFCreateRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    WPFCreateRequest request = new WPFCreateRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setDescription("You are about to buy 3 shoes at www.shoes.com!");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setReturnCancelUrl(new URL("http://www.example.com/cancel.html"));
    request.setReturnPendingUrl(new URL("http://www.example.com/payment-pending.html"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setConsumerId("123456");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");
    request.setRememberCard("true");
    request.setLifetime(60);


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Risk Params
    request.setRiskUserId("123456");


    // Transaction Types
    request.addTransactionType("authorize").done();
    request.addTransactionType("sale").done();
    request.setPayLater("true");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.wpf_create(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "description": "You are about to buy 3 shoes at www.shoes.com!",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "return_cancel_url": "http://www.example.com/cancel.html",
    "return_pending_url": "http://www.example.com/payment-pending.html",
    "amount": "100",
    "currency": "USD",
    "consumer_id": "123456",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "remember_card": "true",
    "lifetime": 60,
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "risk_params": {
      "user_id": "123456"
    },
    "transaction_types": [
      "authorize",
      "sale"
    ],
    "business_attributes": {
      "name_of_the_supplier": "Best Furniture"
    },
    "pay_later": true,
    "reminder_language": "en",
    "reminders": [
      {
        "channel": "email",
        "after": 40
      },
      {
        "channel": "sms",
        "after": 10
      }
    ]
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://staging.wpf.e-comprocessing.net/wpf \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <wpf_payment>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <description>You are about to buy 3 shoes at www.shoes.com!</description>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_cancel_url>http://www.example.com/cancel.html</return_cancel_url>
    <return_pending_url>http://www.example.com/payment-pending.html</return_pending_url>
    <amount>100</amount>
    <currency>USD</currency>
    <consumer_id>123456</consumer_id>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <remember_card>true</remember_card>
    <lifetime>60</lifetime>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
    <transaction_types>
      <transaction_type moto="true" name="authorize" fx_rate_id="123"/>
      <transaction_type crypto="true" name="sale" fx_rate_id="123"/>
    </transaction_types>
    <business_attributes>
      <name_of_the_supplier>Best Furniture</name_of_the_supplier>
    </business_attributes>
    <pay_later>true</pay_later>
    <reminder_language>en</reminder_language>
    <reminders>
      <reminder>
        <channel>email</channel>
        <after>40</after>
      </reminder>
      <reminder>
        <channel>sms</channel>
        <after>10</after>
      </reminder>
    </reminders>
  </wpf_payment>'
```

Web Payment Form With 3 D Sv1 Or 3 D Sv2 Authentication Protocol Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('WPF\Create');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setDescription('You are about to buy 3 shoes at www.shoes.com!')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnCancelUrl('http://www.example.com/cancel.html')
        ->setReturnPendingUrl('http://www.example.com/payment-pending.html')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerId('123456')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')
        ->setRememberCard('true')
        ->setLifetime('60')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // Risk Params
        ->setRiskUserId('123456')


        // Transaction Types
        ->addTransactionType('authorize3d')
        ->addTransactionType('wechat')
        ->setPayLater('true')


        // Reminders
        ->addReminder('email', '40')
        ->addReminder('sms', '10');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.wpf.WPFCreateRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    WPFCreateRequest request = new WPFCreateRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setDescription("You are about to buy 3 shoes at www.shoes.com!");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setReturnCancelUrl(new URL("http://www.example.com/cancel.html"));
    request.setReturnPendingUrl(new URL("http://www.example.com/payment-pending.html"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setConsumerId("123456");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");
    request.setRememberCard("true");
    request.setLifetime(60);


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Risk Params
    request.setRiskUserId("123456");


    // Transaction Types
    request.addTransactionType("authorize3d").done();
    request.addTransactionType("wechat").done();
    request.setPayLater("true");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.wpf_create(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "description": "You are about to buy 3 shoes at www.shoes.com!",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "return_cancel_url": "http://www.example.com/cancel.html",
    "return_pending_url": "http://www.example.com/payment-pending.html",
    "amount": "100",
    "currency": "USD",
    "consumer_id": "123456",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "remember_card": "true",
    "lifetime": 60,
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "risk_params": {
      "user_id": "123456"
    },
    "transaction_types": [
      "authorize3d",
      "wechat"
    ],
    "business_attributes": {
      "name_of_the_supplier": "Best Furniture"
    },
    "pay_later": true,
    "reminder_language": "en",
    "reminders": [
      {
        "channel": "email",
        "after": 40
      },
      {
        "channel": "sms",
        "after": 10
      }
    ]
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://staging.wpf.e-comprocessing.net/wpf \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <wpf_payment>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <description>You are about to buy 3 shoes at www.shoes.com!</description>
   <notification_url>https://www.example.com/notification</notification_url>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <return_cancel_url>http://www.example.com/cancel.html</return_cancel_url>
   <return_pending_url>http://www.example.com/payment-pending.html</return_pending_url>
   <amount>100</amount>
   <currency>USD</currency>
   <consumer_id>123456</consumer_id>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <remember_card>true</remember_card>
   <lifetime>60</lifetime>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <risk_params>
     <user_id>123456</user_id>
   </risk_params>
   <transaction_types>
     <transaction_type name="authorize3d"/>
     <transaction_type name="wechat"/>
   </transaction_types>
   <business_attributes>
     <name_of_the_supplier>Best Furniture</name_of_the_supplier>
   </business_attributes>
   <pay_later>true</pay_later>
   <reminder_language>en</reminder_language>
   <reminders>
     <reminder>
       <channel>email</channel>
       <after>40</after>
     </reminder>
     <reminder>
       <channel>sms</channel>
       <after>10</after>
     </reminder>
   </reminders>
 </wpf_payment>'
```

Web Payment Form With 3 D Sv1 Or 3 D Sv2 Authentication Protocol Including Additional Optional 3 D Sv2 Attributes Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('WPF\Create');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setDescription('You are about to buy 3 shoes at www.shoes.com!')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnCancelUrl('http://www.example.com/cancel.html')
        ->setReturnPendingUrl('http://www.example.com/payment-pending.html')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setConsumerId('123456')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')
        ->setRememberCard('true')
        ->setLifetime('60')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // Risk Params
        ->setRiskUserId('123456')


        // Transaction Types
        ->addTransactionType('init_recurring_sale3d')
        ->addTransactionType('sofort')


        // Threeds V2 Params
        ->setThreedsControl('{"challenge_window_size"="full_screen", "challenge_indicator"="preference"}')
        ->setThreedsPurchase('{"category"="goods"}')
        ->setThreedsRecurring('{"expiration_date"="05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"="verified_address", "delivery_timeframe"="electronic", "reorder_items_indicator"="reordered", "pre_order_purchase_indicator"="merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"="05-02-2020", "update_indicator"="more_than_60days", "last_change_date"="05-11-2020", "password_change_indicator"="no_change", "password_change_date"
        ->setPayLater('true')


        // Reminders
        ->addReminder('email', '40')
        ->addReminder('sms', '10');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.wpf.WPFCreateRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    WPFCreateRequest request = new WPFCreateRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setDescription("You are about to buy 3 shoes at www.shoes.com!");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setReturnCancelUrl(new URL("http://www.example.com/cancel.html"));
    request.setReturnPendingUrl(new URL("http://www.example.com/payment-pending.html"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setConsumerId("123456");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");
    request.setRememberCard("true");
    request.setLifetime(60);


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Risk Params
    request.setRiskUserId("123456");


    // Transaction Types
    request.addTransactionType("init_recurring_sale3d").done();
    request.addTransactionType("sofort").done();


    // Threeds V2 Params
    request.setThreedsControl("{"challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"goods"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setPayLater("true");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.wpf_create(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "description": "You are about to buy 3 shoes at www.shoes.com!",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success"
```

```
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "return_cancel_url": "http://www.example.com/cancel.html",
    "return_pending_url": "http://www.example.com/payment-pending.html",
    "amount": "100",
    "currency": "USD",
    "consumer_id": "123456",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "remember_card": "true",
    "lifetime": 60,
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "risk_params": {
      "user_id": "123456"
    },
    "transaction_types": [
      "init_recurring_sale3d",
      "sofort"
    ],
    "business_attributes": {
      "name_of_the_supplier": "Best Furniture"
    },
    "threeds_v2_params": {
      "control": {
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "goods"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      }
    },
    "pay_later": true,
    "reminder_language": "en",
    "reminders": [
      {
        "channel": "email",
        "after": 40
      },
      {
        "channel": "sms",
        "after": 10
      }
    ]
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://staging.wpf.e-comprocessing.net/wpf \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <wpf_payment>
   <transaction_id>119643250547501c79d8295</transaction_id>
   <usage>40208 concert tickets</usage>
   <description>You are about to buy 3 shoes at www.shoes.com!</description>
   <notification_url>https://www.example.com/notification</notification_url>
   <return_success_url>http://www.example.com/success</return_success_url>
   <return_failure_url>http://www.example.com/failure</return_failure_url>
   <return_cancel_url>http://www.example.com/cancel.html</return_cancel_url>
   <return_pending_url>http://www.example.com/payment-pending.html</return_pending_url>
   <amount>100</amount>
   <currency>USD</currency>
   <consumer_id>123456</consumer_id>
   <customer_email>travis@example.com</customer_email>
   <customer_phone>+1987987987987</customer_phone>
   <remember_card>true</remember_card>
   <lifetime>60</lifetime>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <risk_params>
     <user_id>123456</user_id>
   </risk_params>
   <transaction_types>
     <transaction_type name="init_recurring_sale3d"/>
     <transaction_type name="sofort"/>
   </transaction_types>
   <business_attributes>
     <name_of_the_supplier>Best Furniture</name_of_the_supplier>
   </business_attributes>
   <threeds_v2_params>
     <control>
       <challenge_window_size>full_screen</challenge_window_size>
       <challenge_indicator>preference</challenge_indicator>
     </control>
     <purchase>
       <category>goods</category>
     </purchase>
     <recurring>
       <expiration_date>05-08-2021</expiration_date>
       <frequency>30</frequency>
     </recurring>
     <merchant_risk>
       <shipping_indicator>verified_address</shipping_indicator>
       <delivery_timeframe>electronic</delivery_timeframe>
       <reorder_items_indicator>reordered</reorder_items_indicator>
       <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
       <pre_order_date>05-03-2021</pre_order_date>
       <gift_card>true</gift_card>
       <gift_card_count>2</gift_card_count>
     </merchant_risk>
     <card_holder_account>
       <creation_date>05-02-2020</creation_date>
       <update_indicator>more_than_60days</update_indicator>
       <last_change_date>05-11-2020</last_change_date>
       <password_change_indicator>no_change</password_change_indicator>
       <password_change_date>21-01-2021</password_change_date>
       <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
       <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
       <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
       <transactions_activity_previous_year>10</transactions_activity_previous_year>
       <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
       <purchases_count_last_6_months>5</purchases_count_last_6_months>
       <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
       <registration_indicator>30_to_60_days</registration_indicator>
       <registration_date>05-02-2019</registration_date>
     </card_holder_account>
   </threeds_v2_params>
   <pay_later>true</pay_later>
   <reminder_language>en</reminder_language>
   <reminders>
     <reminder>
       <channel>email</channel>
       <after>40</after>
     </reminder>
     <reminder>
       <channel>sms</channel>
       <after>10</after>
     </reminder>
   </reminders>
 </wpf_payment>'
```

Request Parameters

Parameter	Required	Format	Description

Parameter	Required	Format	Description
transaction_id	required	string(255)	Unique transaction id defined by merchant
usage	optional	string(255)	Description of the transaction for later use.
amount	required*	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	required*	string(3)	Currency code in ISO 4217
description	optional	string	a text describing the reason of the payment (e.g. "you're buying concert tickets")
consumer_id	required*	string(10)	See Consumers and Tokenization. Saved cards will be listed for user to select
customer_email	required*	e-mail address	Must contain valid e-mail of customer
customer_phone	required*	string(32)	Must contain valid phone number of customer
notification_url	required*	url	URL at merchant where gateway sends outcome of transaction.
return_success_url	required*	url	URL where customer is sent to after successful payment
return_failure_url	required*	url	URL where customer is sent to after unsuccessful payment
return_cancel_url	required*	string	URL where customer is sent to when the customer cancels the payment process within the WPF
return_pending_url	optional	string	URL where customer is sent to when asynchronous payment is pending confirmation
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required*	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
transaction_types	required		The transaction types that the merchant is willing to accept payments for
transaction_type	required	string	One of the available WPF transaction types. Multiple transaction type elements supported. Attribute 'name' contains the transaction type name in question
business_attributes	required*		Check business attributes section.
event_start_date	required*	dd-mm-yyyy	The date when event starts in format dd-mm-yyyy
event_end_date	required*	dd-mm-yyyy	The date when event ends in format dd-mm-yyyy
event_organizer_id	required*	string	
event_id	required*	string	
date_of_order	required*	dd-mm-yyyy	The date when order was placed in format dd-mm-yyyy
delivery_date	required*	dd-mm-yyyy	Date of the expected delivery in format dd-mm-yyyy

Parameter	Required	Format	Description
name_of_the_supplier	required*	string	
threeds_v2_params	optional		3DSv2 async parameters. They must be submitted in order to use the 3DSv2 authentication protocol in asynchronous workflow
control	optional		General params for preferences in authentication flow and providing device interface information.
challenge_window_size	optional	string	Identifies the size of the challenge window for the consumer. For more information, go to3DSv2 control params
challenge_indicator	optional	string	The value has weight and might impact the decision whether a challenge will be required for the transaction or not. If not provided, it will be interpreted as **no_preference**. For more information, go to3DSv2 control params
purchase	optional		Purchase related params providing with additional information regarding the order.
category	optional	string	Optional for transactions to be processed through the 3DSv2 authentication protocol.
recurring	optional		Additional optional recurring attributes when InitRecurringSale3d is included in the **transaction_types**.
expiration_date	optional	dd-mm-yyyy	A future date indicating the end date for any further subsequent transactions. For more information, go to3DSv2 recurring params
frequency	optional	integer	Indicates the minimum number of days between subsequent transactions. An empty value indicates the payment frequency is not set.For more information, go to 3DSv2 recurring params
merchant_risk	optional		Merchant risk assessment params. They are all optional, but recommended.
shipping_indicator	optional	string(16)	Indicator code that most accurately describes the shipping method for the cardholder specific transaction. If one or more items are included in the sale, use the Shipping Indicator code for the physical goods. If all digital goods, use the code that describes the most expensive item. Accepted values are: **same_as_billing**, **stored_address**, **verified_address**, **pick_up**, **digital_goods**, **travel**, **event_tickets**, **other**.
delivery_timeframe	optional	string(11)	Indicates the merchandise delivery timeframe. Accepted values are: **electronic**, **same_day**, **over_night**, **another_day**.
reorder_items_indicator	optional	string(10)	Indicates whether the cardholder is reordering previously purchased merchandise. Accepted values are: **first_time**, **reordered**.
pre_order_purchase_indicator	optional	string(21)	Indicates whether cardholder is placing an order for merchandise with a future-availability or release date. Accepted values are: **merchandise_available**, **future_availability**.
pre_order_date	optional	dd-mm-yyyy	For a pre-ordered purchase, the expected date that the merchandise will be available.
gift_card	optional	'true'	Prepaid or gift card purchase.
gift_card_count	optional	integer	For prepaid or gift card purchase, total count of individual prepaid or gift cards/codes purchased. The value is limited to **99**.
card_holder_account	optional		Cardholder account additional information. They are all optional, but recommended, because they have a significant impact on approval rates
creation_date	optional	dd-mm-yyyy	Date that the cardholder opened the account with the 3DS Requester.
update_indicator	optional	string(19)	Length of time since the cardholder's account information with the 3DS Requestor was last changed. Includes Billing or Shipping address, new payment account, or new user(s) added. Accepted values are: **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
last_change_date	optional	dd-mm-yyyy	Date that the cardholder's account with the 3DS Requestor was last changed. Including Billing or Shipping address, new payment accout, or new user(s) added.
password_change_indicator	optional	string(18)	Length of time since the cardholder account with the 3DS Requestor had a password change or account reset. Accepted values are: **no_change**, **during_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
password_change_date	optional	dd-mm-yyyy	Date that cardholder's account with the 3DS Requestor had a password change or account reset.
shipping_address_usage_indicator	optional	string(19)	Indicates when the shipping address used for this transaction was first used with the 3DS Requestor. Accepted values are: **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
shipping_address_date_first_used	optional	dd-mm-yyyy	Date when the shipping address used for this transaction was first used with the 3DS Requestor.
transactions_activity_last_24_hours	optional	integer	Number of transactions (successful and abandoned) for this cardholder account with the 3DS Requestor across all payment accounts in the previous 24 hours.
transactions_activity_previous_year	optional	integer	Number of transactions (successful and abandoned) for this cardholder account with the 3DS Requestor across all payment accounts in the previous year.
provision_attempts_last_24_hours	optional	integer	Number of Add Card attempts in the last 24 hours.
purchases_count_last_6_months	optional	integer	Number of purchases with this cardholder account during the previous six months.
suspicious_activity_indicator	optional	string(22)	Indicates whether the 3DS Requestor has experienced suspicious activity (including previous fraud) on the cardholder account. Accepted values are: **no_suspicious_observed**, **suspicious_observed**.

Parameter	Required	Format	Description
registration_indicator	optional	string(19)	Indicates the length of time that the payment account was enrolled in the cardholder's account with the 3DS Requester. Accepted values are: **guest_checkout**, **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
registration_date	optional	dd-mm-yyyy	Date that the payment account was enrolled in the cardholder's account with the 3DS Requestor.
remember_card	optional	"true"	See Tokenize. Offer the user the option to save cardholder details for future use (tokenize).
lifetime	optional	integer	number of minutes determining how long the WPF will be valid. Will be set to 30 minutes by default. Valid value ranges between 1 minute and 31 days given in minutes
risk_params	optional		list of risk params as described in the Advanced risk management with RiskParams section
user_id (example)	optional	string	the customer's ID within the merchant's system (example)
session_id (example)	optional	string	the customer's session ID within the mer- chant's system (example)
dynamic_descriptor_params	optional		
merchant_name	optional	string(25)	Allows to dynamically override the charge descriptor
merchant_city	optional	string(13)	Allows to dynamically override the merchant phone number
sub_merchant_id	optional	string(15)	Allows to dynamically override the sub-merchant ID.
pay_later	optional	"true"	Signifies whether the 'Pay Later' feature would be enabled on the WPF
reminder_language	optional	string	It must be a valid language abbreviation from the availableWPF languages
reminders	optional		Settings for reminders sending when using the 'Pay Later' feature. The number of the sent reminders would be exactly as sent or configured and delivery failures could be handled on demand. Also there will be no reminders sent if the WPF is already completed
reminder	optional		Settings for a single reminder. Upto three reminders are allowed
channel	optional	string	Channel for sending WPF reminder. Valid values are 'email' and 'sms'
after	optional	integer	Number of minutes after WPF creation when the reminder should be sent. Valid value ranges between 1 minute and 31 days given in minutes
crypto	optional	"true"	Signifies whether a purchase of crypto-currency transaction is performed. Must be populated when purchasing crypto-currency with a VISA card and MCC is 6051. Must be populated when purchasing crypto-currency with a MASTER or INTL MAESTRO card and MCC is one of 6051, 6211. Contact tech-support@e-comprocessing.com for more details
gaming	optional	"true"	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
moto	optional	"true"	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
fx_rate_id	optional	integer	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details

`required* = conditionally required`

The 'amount' and 'currency' parameters are **NOT** required when all of the submitted transaction type(s) have no financial impact on consumer's account (i.e. 'account_verification')

The required business attributes must be provided with the WPF request if you are submitting at least one transaction type that supports business attributes

Successful Response

```
stdClass Object
(
    [transaction_type] => wpf_create
    [status] => new
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [consumer_id] => 123456
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [technical_message] => Transaction successful!
    [message] => Transaction successful!
    [redirect_url] => https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:29.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [amount] => 100
    [currency] => USD
)
```

```
<payment_response content=[
    <transaction_type content=[wpf_create]>
    <status content=[new]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <consumer_id content=[123456]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <technical_message content=[Transaction successful!]>
    <message content=[Transaction successful!]>
    <redirect_url content=[https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1]>
    <timestamp content=[2021-02-04T15:26:29Z]>
    <amount content=[100]>
    <currency content=[USD]>
]>
```

```
{
    transaction_type: "wpf_create",
    status: "new",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    consumer_id: "123456",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    technical_message: "Transaction successful!",
    message: "Transaction successful!",
    redirect_url: "https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1",
    timestamp: "2021-02-04T15:26:29Z",
    amount: "100",
    currency: "USD",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <transaction_type>wpf_create</transaction_type>
  <status>new</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <consumer_id>123456</consumer_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <technical_message>Transaction successful!</technical_message>
  <message>Transaction successful!</message>
  <redirect_url>https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1</redirect_url>
  <timestamp>2021-02-04T15:26:29Z</timestamp>
  <amount>100</amount>
  <currency>USD</currency>
</wpf_payment>
```


Successful With Optional Invalid Transactions For Amount Response


```
stdClass Object
(
    [consumer_id] => 123456
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:29.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [amount] => 100
    [currency] => USD
    [redirect_url] => https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1
    [invalid_transactions_for_amount] => alipay
)
```

```
<payment_response content=[
    <consumer_id content=[123456]>
    <timestamp content=[2021-02-04T15:26:29Z]>
    <amount content=[100]>
    <currency content=[USD]>
    <redirect_url content=[https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1]>
    <invalid_transactions_for_amount content=[alipay]>
]>
```

```
{
    consumer_id: "123456",
    timestamp: "2021-02-04T15:26:29Z",
    amount: "100",
    currency: "USD",
    redirect_url: "https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1",
    invalid_transactions_for_amount: "alipay",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <consumer_id>123456</consumer_id>
  <timestamp>2021-02-04T15:26:29Z</timestamp>
  <amount>100</amount>
  <currency>USD</currency>
  <redirect_url>https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1</redirect_url>
  <invalid_transactions_for_amount>alipay</invalid_transactions_for_amount>
</wpf_payment>
```

Successful With Funds Status Response

```
stdClass Object
(
    [consumer_id] => 123456
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:29.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [amount] => 100
    [currency] => USD
    [redirect_url] => https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1
    [funds_status] => WAITING
)
```

```
<payment_response content=[
    <consumer_id content=[123456]>
    <timestamp content=[2021-02-04T15:26:29Z]>
    <amount content=[100]>
    <currency content=[USD]>
    <redirect_url content=[https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1]>
    <funds_status content=[WAITING]>
]>
```

```
{
    consumer_id: "123456",
    timestamp: "2021-02-04T15:26:29Z",
    amount: "100",
    currency: "USD",
    redirect_url: "https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1",
    funds_status: "WAITING",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <consumer_id>123456</consumer_id>
  <timestamp>2021-02-04T15:26:29Z</timestamp>
  <amount>100</amount>
  <currency>USD</currency>
  <redirect_url>https://staging.wpf.e-comprocessing.net/en/payment/c7e32c1e9d1</redirect_url>
  <funds_status>WAITING</funds_status>
</wpf_payment>
```

Successful Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
consumer_id	string(10)	Consumer unique reference. See Consumers
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.
redirect_url	url	URL where user has to be redirected to complete payment process. Contains the locale in which the web payment form will be rendered by default. See WPF Internationalization (i18n)
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
invalid_transactions_for_amount	string*	list of comma separated transactions for which amount is not within the allowed limit *present only when at least for one transaction type an amount is invalid, check Currency and Amount Handling for details

Parameter	Type	Description
funds_status	string*	funds status of transaction *present only when the transaction has funds status

Error Response

```
stdClass Object
(
    [transaction_type] => wpf_create
    [status] => error
    [mode] => live
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [code] => 330
    [technical_message] => Unknown system error. Please contact support.
    [message] => Transaction failed, please contact support!
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:29.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [amount] => 100
    [currency] => USD
)
```

```
<payment_response content=[
    <transaction_type content=[wpf_create]>
    <status content=[error]>
    <mode content=[live]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <code content=[330]>
    <technical_message content=[Unknown system error. Please contact support.]>
    <message content=[Transaction failed, please contact support!]>
    <timestamp content=[2021-02-04T15:26:29Z]>
    <amount content=[100]>
    <currency content=[USD]>
]>
```

```
{
    transaction_type: "wpf_create",
    status: "error",
    mode: "live",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    code: "330",
    technical_message: "Unknown system error. Please contact support.",
    message: "Transaction failed, please contact support!",
    timestamp: "2021-02-04T15:26:29Z",
    amount: "100",
    currency: "USD",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <transaction_type>wpf_create</transaction_type>
  <status>error</status>
  <mode>live</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <code>330</code>
  <technical_message>Unknown system error. Please contact support.</technical_message>
  <message>Transaction failed, please contact support!</message>
  <timestamp>2021-02-04T15:26:29Z</timestamp>
  <amount>100</amount>
  <currency>USD</currency>
</wpf_payment>
```

Error Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

NOTIFICATION

WPF Notifications are sent once the WPF payment has reached a final state and are transmitted via HTTP POST (application/x-www-form-urlencoded) with the following parameters:

> Apart from the workflow described above, the Genesis system will also use the notification url endpoint to send notifications to the merchant if a WPF payment is chargebacked.

Example Notification for Successful 3dsv1

```
signature=c5219b3d385e74496b2b48a5497b347e102849f10eacd25b062f823b
&payment_transaction_transaction_type=sale3d
&payment_transaction_terminal_token=e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa
&payment_transaction_unique_id=bad08183a9ec545daf0f24c48361aa10
&payment_transaction_amount=500
&wpf_transaction_id=mtid20110408144716113553696 2
&wpf_status=approved
&wpf_unique_id=26aa150ee68b1b2d6758a0e6c44fce4c
&consumer_id=123456
&payment_transaction_token=ee946db8-d7db-4bb7-b608-b65b153e127d
&notification_type=wpf
&eci=05
&payment_transaction_avs_response_code=5I
&payment_transaction_avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&payment_transaction_cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=payer_authentication
&threeds_target_protocol_version=1
&threeds_concrete_protocol_version=1
```

Example Notification for Successful Frictionless 3dsv2

```
signature=c5219b3d385e74496b2b48a5497b347e102849f10eacd25b062f823b
&payment_transaction_transaction_type=sale3d
&payment_transaction_terminal_token=e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa
&payment_transaction_unique_id=bad08183a9ec545daf0f24c48361aa10
&payment_transaction_amount=500
&wpf_transaction_id=mtid20110408144716113553696 2
&wpf_status=approved
&wpf_unique_id=26aa150ee68b1b2d6758a0e6c44fce4c
&consumer_id=123456
&payment_transaction_token=ee946db8-d7db-4bb7-b608-b65b153e127d
&notification_type=wpf
&eci=05
&payment_transaction_avs_response_code=5I
&payment_transaction_avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&payment_transaction_cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=frictionless
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=2
```

Example Notification for Successful Frictionless 3dsv2 With 3ds Method

```
signature=c5219b3d385e74496b2b48a5497b347e102849f10eacd25b062f823b
&payment_transaction_transaction_type=sale3d
&payment_transaction_terminal_token=e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa
&payment_transaction_unique_id=bad08183a9ec545daf0f24c48361aa10
&payment_transaction_amount=500
&wpf_transaction_id=mtid20110408144716113553696 2
&wpf_status=approved
&wpf_unique_id=26aa150ee68b1b2d6758a0e6c44fce4c
&consumer_id=123456
&payment_transaction_token=ee946db8-d7db-4bb7-b608-b65b153e127d
&notification_type=wpf
&eci=05
&payment_transaction_avs_response_code=5I
&payment_transaction_avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&payment_transaction_cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=frictionless
&threeds_method_status=completed
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=2
```

Example Notification for Successful Challenge 3dsv2

```
signature=c5219b3d385e74496b2b48a5497b347e102849f10eacd25b062f823b
&payment_transaction_transaction_type=sale3d
&payment_transaction_terminal_token=e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa
&payment_transaction_unique_id=bad08183a9ec545daf0f24c48361aa10
&payment_transaction_amount=500
&wpf_transaction_id=mtid201104081447161135536962
&wpf_status=approved
&wpf_unique_id=26aa150ee68b1b2d6758a0e6c44fce4c
&consumer_id=123456
&payment_transaction_token=ee946db8-d7db-4bb7-b608-b65b153e127d
&notification_type=wpf
&eci=05
&payment_transaction_avs_response_code=5I
&payment_transaction_avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&payment_transaction_cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=challenge
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=2
```

Example Notification for Successful Challenge 3dsv2 With 3ds Method

```
signature=c5219b3d385e74496b2b48a5497b347e102849f10eacd25b062f823b
&payment_transaction_transaction_type=sale3d
&payment_transaction_terminal_token=e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa
&payment_transaction_unique_id=bad08183a9ec545daf0f24c48361aa10
&payment_transaction_amount=500
&wpf_transaction_id=mtid201104081447161135536962
&wpf_status=approved
&wpf_unique_id=26aa150ee68b1b2d6758a0e6c44fce4c
&consumer_id=123456
&payment_transaction_token=ee946db8-d7db-4bb7-b608-b65b153e127d
&notification_type=wpf
&eci=05
&payment_transaction_avs_response_code=5I
&payment_transaction_avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&payment_transaction_cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=challenge
&threeds_method_status=completed
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=2
```

Example Notification for Successful 3dsv2 Fallback To 3dsv1

```
signature=c5219b3d385e74496b2b48a5497b347e102849f10eacd25b062f823b
&payment_transaction_transaction_type=sale3d
&payment_transaction_terminal_token=e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa
&payment_transaction_unique_id=bad08183a9ec545daf0f24c48361aa10
&payment_transaction_amount=500
&wpf_transaction_id=mtid201104081447161135536962
&wpf_status=approved
&wpf_unique_id=26aa150ee68b1b2d6758a0e6c44fce4c
&consumer_id=123456
&payment_transaction_token=ee946db8-d7db-4bb7-b608-b65b153e127d
&notification_type=wpf
&eci=05
&payment_transaction_avs_response_code=5I
&payment_transaction_avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&payment_transaction_cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=fallback
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=1
```

Example Notification for Successful 3dsv2 Fallback To 3dsv1 With 3ds Method

```
signature=c5219b3d385e74496b2b48a5497b347e102849f10eacd25b062f823b
&payment_transaction_transaction_type=sale3d
&payment_transaction_terminal_token=e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa
&payment_transaction_unique_id=bad08183a9ec545daf0f24c48361aa10
&payment_transaction_amount=500
&wpf_transaction_id=mtid201104081447161135536962
&wpf_status=approved
&wpf_unique_id=26aa150ee68b1b2d6758a0e6c44fce4c
&consumer_id=123456
&payment_transaction_token=ee946db8-d7db-4bb7-b608-b65b153e127d
&notification_type=wpf
&eci=05
&payment_transaction_avs_response_code=5I
&payment_transaction_avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&payment_transaction_cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=fallback
&threeds_method_status=completed
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=1
```

Name	Type	Description
signature	string	the signature of the notification, should be used to verify the the notification was sent by Genesis
payment_transaction_transaction_type	string	transaction type for the transaction eg: sale3d
payment_transaction_terminal_token	string	the terminal token as used in the processing url
payment_transaction_unique_id	string	unique id generated by Genesis
payment_transaction_amount	string	Amount of the payment transaction. If the transaction is partially approved, this is the partially approved amount. CheckPartial Approvals for details
payment_transaction_partial_approval	string	If the transaction is partially approved, this is set to 'true'. CheckPartial Approvals for details
wpf_transaction_id	string	merchant generated tranaction id
wpf_status	string	status of the payment transaction
wpf_unique_id	string	unique id generated by Genesis, required for WPF payment reconciliation
consumer_id	string(10)	Consumer unique reference. SeeConsumers
payment_transaction_token	string(36)	Plain-text token value. SeeTokenize
notification_type	string	constant value "wpf"
eci	string	See Electronic Commerce Indicator as returned from the MPI for details
payment_transaction_avs_response_code	string	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
payment_transaction_avs_response_text	string	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
payment_transaction_cvv_result_code	string	Card Verification Value response code. Optional, returned only if acquirer supports it.
authorization code	string	A code returned by some acquirers to indicate that a card payment has been authorized.
retrieval_reference_number	string	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.

3DS Attributes

Name	Type	Description
threeds_authentication_flow	string	Identifies the concrete 3DS authentication flow that the transaction has gone through. It will be available in the notification only if the consumer has finished the 3DS authentication with the issuer. The value for 3DSv1 will be payer_authentication. The available values for 3DSv2 are frictionless, challenge and fallback.
threeds_method_status	string	Identifies the status of the 3DS-Method in the scope of 3DSv2 authentication protocol. The possible values are**required**, **in_progress** and **completed**.
threeds_target_protocol_version	string(1)	Identifies the 3DS protocol that has been enforced. The possible values are**1**, **2**. In case it's**2**, you are integrated with the 3DSv2 authentication protocol, otherwise with 3DSv1.
threeds_concrete_protocol_version	string(1)	Identifies the concrete 3DS protocol version that the transaction has gone through. The possible values are**1**, **2**. The value will be **1** in case of 3DSv1 authentication protocol used or a fallback from 3DSv2 to 3DSv1 has happened

Status will be one of the following: approved, declined, error, timeout, pending, refunded, voided, chargebacked, chargeback reversed, represented and second chargebacked.

The signature is a mean of security to ensure that the gate is really the sender of the notification. It is generated by concatenating the unique id of the payment with your API password and generating a SHA-512 Hash (Hex) of the string:

```
SHA-512 Hash Hex of <wpf_unique_id><Your Merchant API password>
```

Notification signature examples

unique id	API password	signature
26aa150ee68b1b2d6758a0e6c44fce4c	50fd87e65eb415f42fb5af4c9cf497662e00b785	c5219b3d385e74496b2b48a549
3f760162ef57a829011e5e2379b3fa17	50fd87e65eb415f42fb5af4c9cf497662e00b785	14519d0db2f7f8f407efccc9b099

You must either use the signature to verify the notification's integrity or make a reconcile to check the final transaction status.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<notification_echo>
  <wpf_unique_id>3f760162ef57a829011e5e2379b3fa17</wpf_unique_id>
</notification_echo>
```

When receiving the notification, you are required to render an xml page containing the transaction's unique id so that the gateway knows that you have accepted the notification. If the XML is not delivered, the notification is sent periodically until the XML is received.

RECONCILE

Reconcile can be used to retrieve data about a payment. This can be useful if you want to retrieve information about a payment whose status is timeout, which returned an error or has changed eg. has beed chargebacked.

Reconcile requests are handled exactly like transaction requests via XML. To a large degree, the WPF Reconcile follows the notions of the standard processing Reconcile API.

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_reconcile>
  <unique_id>26aa150ee68b1b2d6758a0e6c44fce4c</unique_id>
</wpf_reconcile>
```

Parameter	Required	Format	Description
unique_id	required	string(32)	unique id as returned by the create request

Please note that the response may include multiple payment transaction records, since a WPF payment is a container class for multiple payment transactions. Card brand and card number will be available in response only for card transaction types.

Please note, a new response xml node will appear for 3DS transactions depending on the 3DS authentication flow and protocol.

Example Reconcile Response XML for Successful 3dsv1:

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>approved</status>
  <unique_id>26aa150ee68b1b2d6758a0e6c44fce4c</unique_id>
  <transaction_id>mtid20110408144716113553696 2</transaction_id>
  <consumer_id>123456</consumer_id>
  <timestamp>2011-04-08T14:46:27Z</timestamp>
  <amount>5000</amount>
  <currency>USD</currency>
  <usage>Shopify Electronic Transaction</usage>
  <description>You are about to buy shoes from Shopify</description>
  <card_brand>visa</card_brand>
  <card_number>471110...0000</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <card_holder>John Doe</card_holder>
  <expiration_year>2020</expiration_year>
  <expiration_month>2</expiration_month>
  <payment_transaction>
    <status>approved</status>
    <authorization_code>345678</authorization_code>
    <avs_response_code>5I</avs_response_code>
    <avs_response_text>Response+provided+by+issuer+processor%3B+Address+information+not+verified</avs_response_text>
    <cvv_result_code>S</cvv_result_code>
    <response_code>00</response_code>
    <transaction_type>sale3d</transaction_type>
    <unique_id>bad08183a9ec545daf0f24c48361aa10</unique_id>
    <transaction_id>mtid20110408144716113553696 2</transaction_id>
    <arn>74537605259536043849425</arn>
    <terminal_token>e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa</terminal_token>
    <mode>test</mode>
    <timestamp>2011-04-08T14:46:40Z</timestamp>
    <descriptor>e-comprocessing.net/bogus +49123456789</descriptor>
    <bank_account_number>Bank Account Number</bank_account_number>
    <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
    <amount>4900</amount>
    <partial_approval>true</partial_approval>
    <currency>USD</currency>
    <customer_email>john.doe@example.com</customer_email>
    <customer_phone>+11234567890</customer_phone>
    <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
    <scheme_settlement_date>0205</scheme_settlement_date>
    <technical_message>TESTMODE: No real money will be transferred!</technical_message>
    <message>TESTMODE: No real money will be transferred!</message>
      <billing_address>
        <first_name>John</first_name>
        <last_name>Doe</last_name>
        <address1>32, Doestreet</address1>
        <address2></address2>
        <zip_code>12345</zip_code>
        <city>New York</city>
      <state>NY</state>
      <country>US</country>
    </billing_address>
    <threeds>
      <authentication_flow>payer_authentication</authentication_flow>
      <protocol>
        <target_version>1</target_version>
        <concrete_version>1</concrete_version>
      </protocol>
    </threeds>
  </payment_transaction>
</wpf_payment>
```

Example Reconcile Response XML for Successful Frictionless 3dsv2:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>approved</status>
  <unique_id>26aa150ee68b1b2d6758a0e6c44fce4c</unique_id>
  <transaction_id>mtid20110408144716113553696 2</transaction_id>
  <consumer_id>123456</consumer_id>
  <timestamp>2011-04-08T14:46:27Z</timestamp>
  <amount>5000</amount>
  <currency>USD</currency>
  <usage>Shopify Electronic Transaction</usage>
  <description>You are about to buy shoes from Shopify</description>
  <card_brand>visa</card_brand>
  <card_number>401200...0085</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <card_holder>John Doe</card_holder>
  <expiration_year>2020</expiration_year>
  <expiration_month>2</expiration_month>
  <payment_transaction>
    <status>approved</status>
    <authorization_code>345678</authorization_code>
    <avs_response_code>5I</avs_response_code>
    <avs_response_text>Response+provided+by+issuer+processor%3B+Address+information+not+verified</avs_response_text>
    <cvv_result_code>S</cvv_result_code>
    <response_code>00</response_code>
    <transaction_type>sale3d</transaction_type>
    <unique_id>bad08183a9ec545daf0f24c48361aa10</unique_id>
    <transaction_id>mtid20110408144716113553696 2</transaction_id>
    <arn>74537605259536043849425</arn>
    <terminal_token>e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa</terminal_token>
    <mode>test</mode>
    <timestamp>2011-04-08T14:46:40Z</timestamp>
    <descriptor>e-comprocessing.net/bogus +49123456789</descriptor>
    <bank_account_number>Bank Account Number</bank_account_number>
    <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
    <amount>4900</amount>
    <partial_approval>true</partial_approval>
    <currency>USD</currency>
    <customer_email>john.doe@example.com</customer_email>
    <customer_phone>+11234567890</customer_phone>
    <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
    <scheme_settlement_date>0205</scheme_settlement_date>
    <technical_message>TESTMODE: No real money will be transferred!</technical_message>
    <message>TESTMODE: No real money will be transferred!</message>
      <billing_address>
        <first_name>John</first_name>
        <last_name>Doe</last_name>
        <address1>32, Doestreet</address1>
        <address2></address2>
        <zip_code>12345</zip_code>
        <city>New York</city>
      <state>NY</state>
      <country>US</country>
    </billing_address>
    <threeds>
      <authentication_flow>frictionless</authentication_flow>
      <protocol>
        <target_version>2</target_version>
        <concrete_version>2</concrete_version>
      </protocol>
    </threeds>
  </payment_transaction>
</wpf_payment>
```


Example Reconcile Response XML for Successful Challenge 3dsv2 With 3ds Method:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>approved</status>
  <unique_id>26aa150ee68b1b2d6758a0e6c44fce4c</unique_id>
  <transaction_id>mtid2011040814471611355369 62</transaction_id>
  <consumer_id>123456</consumer_id>
  <timestamp>2011-04-08T14:46:27Z</timestamp>
  <amount>5000</amount>
  <currency>USD</currency>
  <usage>Shopify Electronic Transaction</usage>
  <description>You are about to buy shoes from Shopify</description>
  <card_brand>visa</card_brand>
  <card_number>493873...0001</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <card_holder>John Doe</card_holder>
  <expiration_year>2020</expiration_year>
  <expiration_month>2</expiration_month>
  <payment_transaction>
    <status>approved</status>
    <authorization_code>345678</authorization_code>
    <avs_response_code>5I</avs_response_code>
    <avs_response_text>Response+provided+by+issuer+processor%3B+Address+information+not+verified</avs_response_text>
    <cvv_result_code>S</cvv_result_code>
    <response_code>00</response_code>
    <transaction_type>sale3d</transaction_type>
    <unique_id>bad08183a9ec545daf0f24c48361aa10</unique_id>
    <transaction_id>mtid2011040814471611355369 62</transaction_id>
    <arn>74537605259536043849425</arn>
    <terminal_token>e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa</terminal_token>
    <mode>test</mode>
    <timestamp>2011-04-08T14:46:40Z</timestamp>
    <descriptor>e-comprocessing.net/bogus +49123456789</descriptor>
    <bank_account_number>Bank Account Number</bank_account_number>
    <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
    <amount>4900</amount>
    <partial_approval>true</partial_approval>
    <currency>USD</currency>
    <customer_email>john.doe@example.com</customer_email>
    <customer_phone>+11234567890</customer_phone>
    <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
    <scheme_settlement_date>0205</scheme_settlement_date>
    <technical_message>TESTMODE: No real money will be transferred!</technical_message>
    <message>TESTMODE: No real money will be transferred!</message>
      <billing_address>
        <first_name>John</first_name>
        <last_name>Doe</last_name>
        <address1>32, Doestreet</address1>
        <address2></address2>
        <zip_code>12345</zip_code>
        <city>New York</city>
      <state>NY</state>
      <country>US</country>
    </billing_address>
    <threeds>
      <authentication_flow>challenge</authentication_flow>
      <threeds_method>
        <status>completed</status>
      </threeds_method>
      <protocol>
        <target_version>2</target_version>
        <concrete_version>2</concrete_version>
      </protocol>
    </threeds>
  </payment_transaction>
</wpf_payment>
```


Example Reconcile Response XML for Successful 3dsv2 Fallback To 3dsv1:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>approved</status>
  <unique_id>26aa150ee68b1b2d6758a0e6c44fce4c</unique_id>
  <transaction_id>mtid2011040814471611355369 62</transaction_id>
  <consumer_id>123456</consumer_id>
  <timestamp>2011-04-08T14:46:27Z</timestamp>
  <amount>5000</amount>
  <currency>USD</currency>
  <usage>Shopify Electronic Transaction</usage>
  <description>You are about to buy shoes from Shopify</description>
  <card_brand>visa</card_brand>
  <card_number>490117...0003</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <card_holder>John Doe</card_holder>
  <expiration_year>2020</expiration_year>
  <expiration_month>2</expiration_month>
  <payment_transaction>
    <status>approved</status>
    <authorization_code>345678</authorization_code>
    <avs_response_code>5I</avs_response_code>
    <avs_response_text>Response+provided+by+issuer+processor%3B+Address+information+not+verified</avs_response_text>
    <cvv_result_code>S</cvv_result_code>
    <response_code>00</response_code>
    <transaction_type>sale3d</transaction_type>
    <unique_id>bad08183a9ec545daf0f24c48361aa10</unique_id>
    <transaction_id>mtid2011040814471611355369 62</transaction_id>
    <arn>74537605259536043849425</arn>
    <terminal_token>e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa</terminal_token>
    <mode>test</mode>
    <timestamp>2011-04-08T14:46:40Z</timestamp>
    <descriptor>e-comprocessing.net/bogus +49123456789</descriptor>
    <bank_account_number>Bank Account Number</bank_account_number>
    <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
    <amount>4900</amount>
    <partial_approval>true</partial_approval>
    <currency>USD</currency>
    <customer_email>john.doe@example.com</customer_email>
    <customer_phone>+11234567890</customer_phone>
    <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
    <scheme_settlement_date>0205</scheme_settlement_date>
    <technical_message>TESTMODE: No real money will be transferred!</technical_message>
    <message>TESTMODE: No real money will be transferred!</message>
      <billing_address>
        <first_name>John</first_name>
        <last_name>Doe</last_name>
        <address1>32, Doestreet</address1>
        <address2></address2>
        <zip_code>12345</zip_code>
        <city>New York</city>
      <state>NY</state>
      <country>US</country>
    </billing_address>
    <threeds>
      <authentication_flow>fallback</authentication_flow>
      <protocol>
        <target_version>2</target_version>
        <concrete_version>1</concrete_version>
      </protocol>
    </threeds>
  </payment_transaction>
</wpf_payment>
```


Example Reconcile Response XML for successful payment with funds status:


```xml
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>approved</status>
  <unique_id>26aa150ee68b1b2d6758a0e6c44fce4c</unique_id>
  <transaction_id>mtid2011040814471611355369 62</transaction_id>
  <consumer_id>123456</consumer_id>
  <timestamp>2011-04-08T14:46:27Z</timestamp>
  <amount>5000</amount>
  <currency>USD</currency>
  <payment_transaction>
    <status>approved</status>
    <transaction_type>ideal</transaction_type>
    <unique_id>bad08183a9ec545daf0f24c48361aa10</unique_id>
    <transaction_id>mtid2011040814471611355369 62</transaction_id>
    <terminal_token>e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa</terminal_token>
    <mode>test</mode>
    <timestamp>2011-04-08T14:46:40Z</timestamp>
    <descriptor>e-comprocessing.net/bogus +49123456789</descriptor>
    <funds_status>WAITING</funds_status>
    <amount>4900</amount>
    <currency>GBP</currency>
    <customer_email>john.doe@example.com</customer_email>
    <customer_phone>+11234567890</customer_phone>
    <technical_message>TESTMODE: No real money will be transferred!</technical_message>
    <message>TESTMODE: No real money will be transferred!</message>
  </payment_transaction>
</wpf_payment>
```

Example Response XML for voided payment:

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>voided</status>
  <unique_id>26aa150ee68b1b2d6758a0e6c44fce4c</unique_id>
  <transaction_id>mtid20110408144716113553696 2</transaction_id>
  <consumer_id>123456</consumer_id>
  <timestamp>2011-04-08T14:46:27Z</timestamp>
  <amount>5000</amount>
  <currency>USD</currency>
  <usage>Shopify Electronic Transaction</usage>
  <description>You are about to buy shoes from Shopify</description>
  <card_brand>visa</card_brand>
  <card_number>420000...0000</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <card_holder>John Doe</card_holder>
  <expiration_year>2020</expiration_year>
  <expiration_month>2</expiration_month>
  <payment_transaction>
    <status>voided</status>
    <authorization_code>345678</authorization_code>
    <response_code>00</response_code>
    <transaction_type>sale</transaction_type>
    <unique_id>bad08183a9ec545daf0f24c48361aa10</unique_id>
    <transaction_id>mtid20110408144716113553696 2</transaction_id>
    <arn>74537605259536043849425</arn>
    <terminal_token>e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa</terminal_token>
    <mode>test</mode>
    <timestamp>2011-04-08T14:46:40Z</timestamp>
    <descriptor>e-comprocessing.net/bogus +49123456789</descriptor>
    <bank_account_number>Bank Account Number</bank_account_number>
    <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
    <amount>5000</amount>
    <currency>USD</currency>
    <customer_email>john.doe@example.com</customer_email>
    <customer_phone>+11234567890</customer_phone>
    <billing_address>
     <first_name>John</first_name>
     <last_name>Doe</last_name>
     <address1>32, Doestreet</address1>
     <address2></address2>
     <zip_code>12345</zip_code>
     <city>New York</city>
     <state>NY</state>
     <country>US</country>
    </billing_address>
  </payment_transaction>
  <payment_transaction>
    <status>approved</status>
    <authorization_code>345678</authorization_code>
    <response_code>00</response_code>
    <transaction_type>void</transaction_type>
    <unique_id>bad08183a9ec545daf0f24c48361aa10</unique_id>
    <transaction_id>mtid20110408144716113553696 2</transaction_id>
    <terminal_token>e9fd7a957845450fb7ab9dccb498b6e1f6e1e3aa</terminal_token>
    <mode>test</mode>
    <timestamp>2011-04-08T14:46:40Z</timestamp>
    <descriptor>e-comprocessing.net/bogus +49123456789</descriptor>
    <amount>5000</amount>
    <currency>USD</currency>
  </payment_transaction>
</wpf_payment>
```

Example Error Response XML:

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>error</status>
  <code>100</code>
  <technical_message>Unknown system error. Please contact support.</technical_message>
  <message>Transaction failed, please contact support!</message>
</wpf_payment>
```

RECONCILE BY DATE RANGE

Reconcile by Date can be used to retrieve data about payments in date and time range. This can be useful if the merchant wants to retrieve information about payments belonging to the date and time range. For convenience, there are options to define records per page and the exact page of interest.

Reconcile by Date requests are handled exactly like transaction requests in the Processing API. To a large degree, the WPF Reconcile follows the notions of the standard Reconcile in Processing API.

The URL for date range reconcile is:

`https://staging.wpf.e-comprocessing.net/wpf/reconcile/by_date`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.wpf.e-comprocessing.net/wpf/reconcile/by_date \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <wpf_reconcile>
   <start_date>2020-11-07 17:26:30</start_date>
   <end_date>2021-02-05 17:26:30</end_date>
   <page>1</page>
   <records_per_page>100</records_per_page>
 </wpf_reconcile>'
```

Request Parameters

Parameter	Required	Format	Description
start_date	required	yyyy-mm-dd hh:mm:ss	Start date and time of the reconcile range (time is optional)
end_date	optional	yyyy-mm-dd hh:mm:ss	End of date and time of the reconcile range (time is optional)
page	optional	string(11)	Number of the page
records_per_page	optional	1 to 3 digits	Number ot records per page

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>approved</status>
  <unique_id>e27bd9472d40d3734a49e3e5c5ada52d</unique_id>
  <transaction_id>246d15a8644ff203fca6ae39fac8e999</transaction_id>
  <timestamp>2021-01-16</timestamp>
  <amount>500</amount>
  <currency>USD</currency>
  <authorization_code>345678</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
</wpf_payment>
```

Successful Response Parameters

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
transaction_id	string(255)	Unique transaction id defined by merchant
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>error</status>
  <code>340</code>
  <technical_message>start_date has an invalid format</technical_message>
  <message>Please check input data for errors!</message>
</wpf_payment>
```

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>error</status>
  <code>320</code>
  <technical_message>start_date is missing</technical_message>
  <message>Please check input data for errors!</message>
</wpf_payment>
```

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <status>error</status>
  <code>340</code>
  <technical_message>per_page has an invalid format</technical_message>
  <message>Please check input data for errors!</message>
</wpf_payment>
```

Error Response Parameters

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

ERRORS

WPF returns the same error codes/XML as the regular Server-to-Server API methods (e.g. sale). See the Error Section for more details.

WPF transaction types

The web payment form supports the typical card-related transaction types such as authorizes, sales, and init recurring - with and without 3D (see below). If more than one card-based transaction type is passed, then if the cardholder decides to pay with a credit card, the first card-based transaction type with a valid configuration - terminals, MIDs, currencies, etc - is selected and used when cardholder decides to pay with a (credit) card.

Also Account Verification for cards is supported by the web payment form. This is a transaction type for card verifications without any financial impact on cardholder's account. If 'account_verification' is the only transaction type provided, the 'amount' and the 'currency' parameters are **NOT** mandatory. If it is combined with other transaction types, they are still mandatory and required.

In addition, the WPF API supports a host of alternative payment methods (APMs), bank transfer payments, wallets, and more. All of the alternative transaction types are offered to the cardholder for payment, so the cardholder can choose between credit cards and alternatives defined by the merchant. Only credit cards or only a single alternative method can also work, there is no need to always offer credit cards for example.

Merchant custom attributes for a number of the transaction types are required. The WPF API supports those merchant custom attributes - they are submitted as child elements to the transaction type they belong to(see WPF API example request above).

The web payment form has the concept of a default payment method. If a given transaction type has the 'default' attribute set to 'true', then this transaction type will be pre-selected as default when the cardholder is redirected to the web payment form. If more than one transaction type has the 'default' attribute, the first one with this attribute will be pre-selected. In the case there is

only one transaction type requested (with or without the 'default'='true'), this transaction type is automatically set as default by design.

Note that for each transaction type requested by a merchant in the WPF API, a valid configuration should exist - valid terminal, currency, MID, web payment form enabled for the merchant, etc. - otherwise a configuration error will be raised. If this happens, contact the IT support team to resolve/configure your desired transaction types correctly.

Example Request XML with custom attributes:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wpf_payment>
  <transaction_id>wev238f328nc</transaction_id>
  <usage>Order ID 500, Shoes</usage>
  <description>You are about to buy 3 shoes at www.shoes.com!</description>
  <notification_url>https://example.com/notification</notification_url>
  <return_success_url>https://example.com/return_success</return_success_url>
  <return_failure_url>https://example.com/return_failure</return_failure_url>
  <return_cancel_url>https://example.com/return_cancel</return_cancel_url>
  <amount>5000</amount>
  <currency>USD</currency>
  <customer_email>john.doe@example.com</customer_email>
  <customer_phone>+11234567890</customer_phone>
  <card_holder>john doe</card_holder>
  <billing_address>
    <first_name>John</first_name>
    <last_name>Doe</last_name>
    <address1>23, Doestreet</address1>
    <zip_code>11923</zip_code>
    <city>New York City</city>
    <state>NY</state>
    <country>US</country>
  </billing_address>
  <transaction_types>
    <transaction_type name="sale">
      <bin>420000</bin>
      <tail>0000</tail>
      <expiration_date>2017-03</expiration_date>
      <fx_rate_id>123</fx_rate_id>
      <crypto>true</crypto>
    </transaction_type>
    <transaction_type name="sale3d" default="true">
      <tail>1111</tail>
      <expiration_date>2016-03</expiration_date>
      <fx_rate_id>123</fx_rate_id>
      <crypto>true</crypto>
    </transaction_type>
    <transaction_type name="cashu"/>
    <transaction_type name="ezeewallet">
      <source_wallet_id>john.doe@e-comprocessing.net</source_wallet_id>
    </transaction_type>
    <transaction_type name="ppro">
        <payment_method>mybank</payment_method>
    </transaction_type>
    <transaction_type name="insta_debit_payin">
        <customer_account_id>123456</customer_account_id>
    </transaction_type>
    <transaction_type name="invoice">
      <payment_type>secure_invoice</payment_type>
      <customer_birthdate>1989-09-21</customer_birthdate>
      <customer_reference_number>123123</customer_reference_number>
    </transaction_type>
  </transaction_types>
  <risk_params>
    <user_id>123456</user_id>
  </risk_params>
</wpf_payment>
```

Transaction Type	Custom Attribute	Required	Description
authorize			A standard authorization
	bin	no	Card's first 6 digits
	tail	no	Card's last 4 digits
	default	no	Configure as default or not
	expiration_date	no	Expiration month and year
	gaming	no	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
	crypto	no	Signifies whether a purchase of crypto-currency transaction is performed. Must be populated when purchasing crypto-currency with a VISA card and MCC is 6051. Must be populated when purchasing crypto-currency with a MASTER or INTL MAESTRO card and MCC is one of 6051, 6211. Contact tech-support@e-comprocessing.com for more details
	moto	no	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
	fx_rate_id	no	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
authorize3d			A 3D-based authorization

Transaction Type	Custom Attribute	Required	Description
	bin	no	Card's first 6 digits
	tail	no	Card's last 4 digits
	default	no	Configure as default or not
	expiration_date	no	Expiration month and year
	gaming	no	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
	crypto	no	Signifies whether a purchase of crypto-currency transaction is performed. Must be populated when purchasing crypto-currency with a VISA card and MCC is 6051. Must be populated when purchasing crypto-currency with a MASTER or INTL MAESTRO card and MCC is one of 6051, 6211. Contact tech-support@e-comprocessing.com for more details
	moto	no	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
	fx_rate_id	no	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
sale			A standard sale
	bin	no	Card's first 6 digits
	tail	no	Card's last 4 digits
	default	no	Configure as default or not
	expiration_date	no	Expiration month and year
	gaming	no	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
	crypto	no	Signifies whether a purchase of crypto-currency transaction is performed. Must be populated when purchasing crypto-currency with a VISA card and MCC is 6051. Must be populated when purchasing crypto-currency with a MASTER or INTL MAESTRO card and MCC is one of 6051, 6211. Contact tech-support@e-comprocessing.com for more details
	moto	no	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
	fx_rate_id	no	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
sale3d			A 3D-based sale
	bin	no	Card's first 6 digits
	tail	no	Card's last 4 digits
	default	no	Configure as default or not
	expiration_date	no	Expiration month and year
	gaming	no	Signifies whether a gaming transaction is performed. Gaming transactions usually use MCC 7995. Contacttech-support@e-comprocessing.com for more details
	crypto	no	Signifies whether a purchase of crypto-currency transaction is performed. Must be populated when purchasing crypto-currency with a VISA card and MCC is 6051. Must be populated when purchasing crypto-currency with a MASTER or INTL MAESTRO card and MCC is one of 6051, 6211. Contact tech-support@e-comprocessing.com for more details
	moto	no	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
	fx_rate_id	no	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
init_recurring_sale			A standard init recurring
	bin	no	Card's first 6 digits
	tail	no	Card's last 4 digits
	default	no	Configure as default or not
	expiration_date	no	Expiration month and year
	fx_rate_id	no	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details

Transaction Type	Custom Attribute	Required	Description
init_recurring_sale3d			A 3D-based init recurring
	bin	no	Card's first 6 digits
	tail	no	Card's last 4 digits
	default	no	Configure as default or not
	expiration_date	no	Expiration month and year
	fx_rate_id	no	See Get rates for FX Service. Offers the option to use a specific FX rate to convert the transaction processing amount. Used FX rate should have the same source currency as the processing currency. Contact tech-support@e-comprocessing.com for more details
account_verification			Card verification without any financial impact
	bin	no	Card's first 6 digits
	tail	no	Card's last 4 digits
	default	no	Configure as default or not
	expiration_date	no	Expiration month and year
	moto	no	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contacttech-support@e-comprocessing.com for more details
ezeewallet			Wallet-based payment
	source_wallet_id	no	Email address of consumer who owns the source wallet
	default	no	Configure as default or not
sofort			Bank transfer payment, popular in Germany
	default	no	Configure as default or not
cashu			Voucher-based payment
	default	no	Configure as default or not
paysafecard			Voucher-based payment
	default	no	Configure as default or not
post_finance			Online Banking ePayment method
	default	no	Configure as default or not
ppro			Supports payments with EPS, TeleIngreso, SafetyPay, TrustPay, Przelewy24, iDEAL, GiroPay, Mr. Cash and MyBank
	default	no	Configure as default or not
neteller			Wallet-based payment
	default	no	Configure as default or not
poli			Payment by bank account for customers with an Australian or New Zealand bank account.
	default	no	Configure as default or not
p24			Payment by bank account for customers with a Polish bank account.
	default	no	Configure as default or not
idebit_payin			Online Banking ePayment method
	default	no	Configure as default or not
	customer_account_id	yes	Identifier provided by the merchant that uniquely identifies the consumer in their system
insta_debit_payin			Online Banking ePayment method
	default	no	Configure as default or not
	customer_account_id	yes	Identifier provided by the merchant that uniquely identifies the consumer in their system
paypal_express			Express payment by PayPal balance.
	default	no	Configure as default or not
webmoney			Bank transfer payment, popular in Russian Federation.
sdd_sale			SEPA Direct Debit Sale

Transaction Type	Custom Attribute	Required	Description
sdd_init_recurring_sale			SEPA Direct Debit init recurring
trustly_sale			Solution for Online Banking ePayments.
	return_success_url_target	no	URLTarget for successful payment in Trustly iFrame. Possible values:**top**, **self**, **parent**
trustly_withdrawal			Allows you to pay with your online bank.
wechat			Online Banking ePayment method
	product_code	no	Product code
	product_num	no	Product number
	product_desc	no	Product description
invoice			APMs Invoice Transaction
	payment_type	yes	Payment type: **klarna** / **secure_invoice**
	customer_birthdate	yes	Customer birthdate. For example: **1989-09-22**
	customer_reference_number	yes	Customer number in merchant system

---

WPF Internationalization (i18n)

The web payment form is internationalized (i18n) and supports the following locales and corresponding languages:

Locale	Language	Description
en	English	English locale and language settings (this is the default)
it	Italian	Italian locale and language settings
es	Spanish	Spanish locale and language settings
fr	French	French locale and language settings
de	German	German locale and language
pl	Polish	Polish locale and language
ja	Japanese	Japanese locale and language
zh	Mandarin Chinese	Mandarin Chinese locale and language
ar	Arabic	Arabic locale and language
pt	Portuguese	Portuguese locale and language
tr	Turkish	Turkish locale and language
ru	Russian	Russian locale and language
hi	Hindu	Hindu locale and language
bg	Bulgarian	Bulgarian locale and language
nl	Dutch	Dutch locale and language
is	Icelandic	Icelandic locale and language
id	Indonesian	Indonesian locale and language
ms	Malay	Malay locale and language
th	Thai	Thai locale and language
cs	Czech	Czech locale and language
hr	Croatian	Croatian locale and language
sl	Slovenian	Slovenian locale and language
fi	Finnish	Finnish locale and language
no	Norwegian	Norwegian locale and language
da	Danish	Danish locale and language
sv	Swedish	Swedish locale and language

Note that the English locale is the default, and if you don't specify another locale in the WPF API, this is the locale and language that the web payment form will be translated into.

The customer has the option to change the language once he has been redirected to the WPF via the received `redirect_url`.

It is a good practice to submit the desired locale in the WPF API create call, so that a proper `redirect_url` is returned instead of manually parsing and generating a locale-specific `redirect_url`.

If a locale/language different than the current ones is needed or any translation errors/inconsistencies are spotted, feel free to contact the IT Support team at tech-support@e-comprocessing.com and contribute to the translation effort.

3DSecure

3DSecure (3-domain structure), also known as a payer authentication, is a security protocol that helps to prevent fraud in online credit and debit card transactions. This additional security was initiated and created by **Visa** and **MasterCard** and it's branded as **Verified by Visa** and **MasterCard SecureCode** respectively.

3DSecure (3DS): A set of protocols and procedures through which a customer's ownership of the credit card they are using can be assessed. 3DSv1 requires interaction with the customers browser for authentication. 3DSv2 offers a number of enhancements, including frictionless flows.

V1

INTRODUCTION

3DSv1 (referred to as 3D Payer Authentication on the gateway), is a security protocol created by EMVCo and major card schemes that aims to prevent fraudulent use of credit cards by authenticating cardholders in card-not-present (CNP) transactions.

The asynchronous workflow may take place on the merchants site in case the merchant has a MPI or wants to use another MPI. In this case a 3DSecure transaction will be handled synchronous but requires a different set of parameters. See Authorize3d, Sale3d, or InitRecurringSale3d transactions for details.

If the card is considered valid for 3DSecure, the payment becomes asynchronous as the consumer gets redirected to a form at the gateway where he interacts with the issuer to complete the authentication.

The merchant will be notified of the outcome via the `notification_url`.

Both `return_success_url`, `return_failure_url` and `notification_url` need to be supplied in the transaction request, so the the can be properly redirected to a return URL after the payment has taken place. An asynchronous notification is then sent to the `notification_url`.

AUTHENTICATION FLOW

> Transactions can fail prior to invoking the 3D mechanism (in case of e.g. invalid card number, expiry date or risk checks). In this case, the 3D transaction becomes synchronous.

> If the card is not participating in 3DS and non-participating cards are allowed on the MID configuration, the async 3D transaction behaves like synchronous and proceeds with the authorization message.

> Please, use only HTTP **GET** method in order to navigate consumer to any of the redirect URLs in the 3DS authentication scope. The other HTTP methods **POST**, **PUT**, etc are not supported for redirect URLs and won't be accepted for redirection. HTTP **POST** and **PUT** are accepted in other scenarios for the 3DS-Method.

> In order to enforce using the 3DSv1 authentication protocol, make sure to **NOT** include the **threeds_v2_params** in the transaction request.

In case the merchant does not have a MPI, the workflow is handled by Genesis and looks like in the diagram below:

Merchant
<payment_response>
...
<status>error</status>
...
</payment_response>
NO
Card valid?
YES
Acquire
Enrollment status
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
3DS Server
Enrollment status
provided
NO
Enrolled?
YES
Merchant
<payment_response>
...
<status>error / declined</status>
...
</payment_response>
NO
Authorization
allowed?
YES
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
Process
Transaction
Gateway
Merchant
<payment_response>
...
<status>declined</status>
...
</payment_response>
NO
Transaction
successful?
YES
Merchant
<payment_response>
...
<status>approved</status>
...
</payment_response>
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
Payer Authentication
required
Merchant
<payment_response>
...
<status>pending_async</status>
<redirect_url>3ds_v1_payer_authentication_url</...>
<redirect_url_type>3ds_v1_payer_authentication</...>
...
</payment_response>
Gateway

Handle response
Merchant
Redirect consumer to
redirect_url
(HTTP GET)
Gateway
Acquire
Payer authentication
Form
(HTTP POST)
Access Control
Server (ACS)
Authentication Form
provided
Consumer
Render
Authentication form
Gateway
Complete the 2FA
PAYER AUTHENTICATION
3DSv1
Consumer
Submit
Authentication
form
(HTTP POST)
Access Control
Server (ACS)
Verify
Authentication
Access Control
Server (ACS)
Callback
(HTTP POST)
Gateway
Acquire MPI params
3DS Server
MPI params
provided
Gateway

TESTING

Test Cards The following test cards can be used to return specific responses in each state

Card Number	Card Brand	Transaction Result
4711100000000000	Visa	3DSecure enrolled
4012001037461114	Visa	3DSecure enrolled failing authentication
4012001036853337	Visa	3DSecure unavailable - Card Not Participating
4012001037484447	Visa	Error in 3DSecure Network in first step of 3DSecure authentication process
4012001036273338	Visa	Error in 3DSecure Network in second (asynchronous) step of 3DSecure authentication process
5555555555559997	MasterCard	3DSecure enrolled
5185540810000019	MasterCard	3DSecure enrolled failing authentication
5454545454545454	MasterCard	3DSecure unavailable - Card Not Participating
5200828282828210	MasterCard	Error in 3DSecure Network in first step of 3DSecure authentication process
5204230080000017	MasterCard	Error in 3DSecure Network in second (asynchronous) step of 3DSecure authentication process

When redirected to the dummy authentication page you may enter any password you like.

V2

INTRODUCTION

How does 3DS 2.0 work? Better, stronger fraud-detection intelligence, to put it simply.

3DSecure has been around for years and creates an authentication data connection between digital merchants, payment networks and financial institutions to be able to analyze and share more intelligence about transactions. The new 2.0 version of the technology enables a real-time, secure, information-sharing pipeline that merchants can use to send an unprecedented number of transaction attributes that the issuer can use to authenticate customers more accurately without asking for a static password or slowing down commerce.

All in all, the second iteration of the 3DSecure protocol is a great improvement for all parties involved.

It allows merchants to provide protection across multiple platforms with easy integration into their systems, including mobile applications, while still being able to exploit the benefits that the protocol provides. It is also estimated that cart abandonment rates will dramatically fall.

Issuers can share and receive more data with merchants, giving them a greater insight into transactional patterns which will allow them to determine the risk with higher accuracy and therefore improve the authentication process. 3DS 2.0 will also offer banks the opportunity to effortlessly comply with the requirements of PSD2.

For customers, the updates are perhaps most beneficial. They can now enjoy protection from fraudulent transactions across most platforms.

Not only will transactions be more secure through the implementation of increased protection methods such as two-factor authentication (2FA), but the consumer experience will also be greatly improved by frictionless flows through risk-based authentication.

3DS 2.0 is an updated protocol created to recognise the need of current and future requirements including adding the support of mobile-based authentication and digital wallets integration. One of the main benefits is the introduction of a frictionless flow that allows issuers to approve a transaction without requiring any manual input from the cardholder.

3DSecure Challenge: The 3DS 2.0 step during which the customer interacts with the card issuer to provide additional authentication for the transaction.

3DSecure Method: Refers to the 3DS 2.0 step during which the card issuer gathers information about the customer via their browser. A card issuer may use this data to help make a risk-based decision , for example if the issuer can identify that the cardholder has used this web browser to make purchases in the past, they may decide the transaction is low risk and consider the customer authenticated without requiring a 3DSecure Challenge.

3DSecure Method Handling: The 3DSecure Method allows for additional browser information to be gathered by an ACS prior to receipt of the AReq message to help facilitate the transaction risk assessment. The use of the 3DSecure Method by an ACS is optional. The inclusion of 3DSecure Method URL and account ranges in a Directory Server is optional for an ACS.

3DSecure 1 Fallback A possible alternate workflow if certain criteria are met during 3DSecure Authentication Request phase and customer authentication using 3DSecure version 1 is to be used rather than 3D-Secure version 2.

Access Control Server: The ACS contains the authentication rules and is controlled by the Issuer. ACS functions include:

- Verifying whether a card number is eligible for 3DSecure authentication
- Verifying whether a Consumer Device type is eligible for 3DSecure authentication
- Authenticating the Cardholder for a specific transaction

Consumer Device: The Consumer Device has the capability to run a 3DSecure Requestor App or present a website on a browser that can be used for 3DSecure authentication. The Consumer Device-based components of the 3DSecure Requestor Environment depend on the model:

- App-based - the 3DSecure SDK integrated with the 3DSecure Requestor App
- Browser-based - a browser utilising the 3DSecure Method

Frictionless: The authentication completes without requiring a interaction between consumer and issuer.

REQUEST PARAMS

In order to enforce the 3DSecure v2 authentication protocol, the request params below must be submitted in the transaction request for Authorize3d Sale3d InitRecurringSale3d.

Request Parameters

Parameter	Required	Format	Description
threeds_v2_params	required*		3DSv2 async parameters. They must be submitted in order to use the 3DSv2 authentication protocol in asynchronous workflow
threeds_method	optional		3DS-Method related parameters for any callbacks and notifications.
callback_url	optional	url	Specific 3DS-Method callback URL after the 3DS-Method completes. The actual status will be provided via HTTP POST to that URL. For more information, go to 3DSv2 method params
control	required*		General params for preferences in authentication flow and providing device interface information.
device_type	required*	string	Identifies the device channel of the consumer, **required** in the 3DSv2 authentication protocol. For more information, go to 3DSv2 control params
challenge_window_size	required*	string	Identifies the size of the challenge window for the consumer. For more information, go to 3DSv2 control params
challenge_indicator	optional	string	The value has weight and might impact the decision whether a challenge will be required for the transaction or not. If not provided, it will be interpreted as **no_preference**. For more information, go to 3DSv2 control params
purchase	optional		Purchase related params providing with additional information regarding the order.
category	optional	string	Identifies the type of transaction being authenticated. This field is required in some markets.Accepted values are: **goods**, **service**, **check_acceptance**, **account_funding**, **quasi_cash**, **prepaid_activation**, **loan**.
merchant_risk	recommended		Merchant risk assessment params. They are all optional, but recommended.
shipping_indicator	optional	string(16)	Indicator code that most accurately describes the shipping method for the cardholder specific transaction. If one or more items are included in the sale, use the Shipping Indicator code for the physical goods. If all digital goods, use the code that describes the most expensive item. Accepted values are: **same_as_billing**, **stored_address**, **verified_address**, **pick_up**, **digital_goods**, **travel**, **event_tickets**, **other**.
delivery_timeframe	optional	string(11)	Indicates the merchandise delivery timeframe. Accepted values are: **electronic**, **same_day**, **over_night**, **another_day**.

Parameter	Required	Format	Description
reorder_items_indicator	optional	string(10)	Indicates whether the cardholder is reordering previously purchased merchandise. Accepted values are: **first_time**, **reordered**.
pre_order_purchase_indicator	optional	string(21)	Indicates whether cardholder is placing an order for merchandise with a future-availability or release date. Accepted values are: **merchandise_available**, **future_availability**.
pre_order_date	optional	dd-mm-yyyy	For a pre-ordered purchase, the expected date that the merchandise will be available.
gift_card	optional	'true'	Prepaid or gift card purchase.
gift_card_count	optional	integer	For prepaid or gift card purchase, total count of individual prepaid or gift cards/codes purchased. The value is limited to **99**.
card_holder_account	recommended		Cardholder account additional information. They are all optional, but recommended, because they have a significant impact on approval rates
creation_date	optional	dd-mm-yyyy	Date that the cardholder opened the account with the 3DS Requester.
update_indicator	optional	string(19)	Length of time since the cardholder's account information with the 3DS Requestor was last changed. Includes Billing or Shipping address, new payment account, or new user(s) added. Accepted values are: **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
last_change_date	optional	dd-mm-yyyy	Date that the cardholder's account with the 3DS Requestor was last changed. Including Billing or Shipping address, new payment accout, or new user(s) added.
password_change_indicator	optional	string(18)	Length of time since the cardholder account with the 3DS Requestor had a password change or account reset. Accepted values are: **no_change**, **during_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
password_change_date	optional	dd-mm-yyyy	Date that cardholder's account with the 3DS Requestor had a password change or account reset.
shipping_address_usage_indicator	optional	string(19)	Indicates when the shipping address used for this transaction was first used with the 3DS Requestor. Accepted values are: **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
shipping_address_date_first_used	optional	dd-mm-yyyy	Date when the shipping address used for this transaction was first used with the 3DS Requestor.
transactions_activity_last_24_hours	optional	integer	Number of transactions (successful and abandoned) for this cardholder account with the 3DS Requestor across all payment accounts in the previous 24 hours.
transactions_activity_previous_year	optional	integer	Number of transactions (successful and abandoned) for this cardholder account with the 3DS Requestor across all payment accounts in the previous year.
provision_attempts_last_24_hours	optional	integer	Number of Add Card attempts in the last 24 hours.
purchases_count_last_6_months	optional	integer	Number of purchases with this cardholder account during the previous six months.
suspicious_activity_indicator	optional	string(22)	Indicates whether the 3DS Requestor has experienced suspicious activity (including previous fraud) on the cardholder account. Accepted values are: **no_suspicious_observed**, **suspicious_observed**.
registration_indicator	optional	string(19)	Indicates the length of time that the payment account was enrolled in the cardholder's account with the 3DS Requester. Accepted values are: **guest_checkout**, **current_transaction**, **less_than_30days**, **30_to_60_days**, **more_than_60days**.
registration_date	optional	dd-mm-yyyy	Date that the payment account was enrolled in the cardholder's account with the 3DS Requestor.
browser	required*		For browser-based transactions. They are all *required* in case the **device_type** is set to **browser**
accept_header	required*	string(2048)	The exact content of the HTTP **ACCEPT** header as sent to the 3DS Requester from the Cardholder browser. Any other header different than the **ACCEPT** header will be rejected. Example: `application/json,text/plain,text/html,*/*`.
java_enabled	required*	boolean	Boolean that represents the ability of the cardholder browser to execute Java. The value can be retrieved by accessing a property of the navigator with JavaScript, `navigator.javaEnabled`.
language	required*	string(8)	Value representing the browser language as defined in IETF BCP47. Note that only one browser language tag is about to be submitted as per the above **IETF BCP47**. Numeric chars are also allowed in the subtag and will represent the region.Example: `en-GB`, `zh-guoyu`, `fil-PH`, `gsw`, `es-419`, `de-1996`, etc. The value can be retrieved by accessing a property of the navigator with JavaScript, `navigator.language`.
color_depth	required*	integer	Value representing the bit depth of the colour palette for displaying images, in bits per pixel. Obtained from Cardholder browser using the `screen.colorDepth` property. The value as per EMVCo specs can be one of **1**, **4**, **8**, **15**, **16**, **24**, **32**, **48**. In case, an unsupported `color_depth` is determined, the nearest supported value that is less than the actual one needs to be submitted. For example, if the obtained value is **30**, which is not supported as per EMVCo specs, **24** has to be submitted.
screen_height	required*	integer	Total height of the Cardholder's screen in pixels. Value is returned from the screen.height property.
screen_width	required*	integer	Total width of the Cardholder's screen in pixels. Value is returned from the screen.width property.
time_zone_offset	required*	string(5)	Time difference between UTC time and the Cardholder browser local time, in **minutes**. Note that the offset is positive if the local time zone is behind UTC and negative if it is ahead. If **UTC -5** hours then submit `300` or `+300`, If **UTC +2** hours then `-120`. The value can be retrieved using Javascript `getTimezoneOffset()` method over **Date** object.
user_agent	required*	string(2048)	Exact content of the HTTP user-agent header.

Parameter	Required	Format	Description
sdk	required*		For application-based transactions. They are all *required* in case the **device_type** is set to **application**
interface	required*	string(6)	SDK Interface types that the device of the consumer supports for displaying specific challenge interfaces within the SDK. Accepted values are: **native**, **html**, **both**.
ui_types	required*		Lists all UI types that the device of the consumer supports for displaying specific challenge interfaces within the SDK.
ui_type	required*	string(13)	UI type that the device of the consumer supports for displaying specific challenge interface. Accepted values are: **text**, **single_select**, **multi_select**, **out_of_bag**, **other_html**.
application_id	required*	string(36)	Universally unique ID created upon all installations and updates of the 3DS Requestor APp on a Customer Device. This will be newly generated and stored by the 3DS SDK for each installation or update. The field is limited to 36 characters and it shall have a canonical format as defined in IETF RFC 4122.
encrypted_data	required*	string(64000)	JWE Object as defined Section 6.2.2.1 containing data encrypted by the SDK for the DS to decrypt. The data will be present when sending to DS, but not present from DS to ACS.
ephemeral_public_key_pair	required*	string(256)	Public key component of the ephemeral key pair generated by the 3DS SDK and used to establish session keys between the 3DS SDK and ACS. In AReq, this data element is contained within the ACS Signed Content JWS Object. The field is limited to maximum 256 characters.
max_timeout	required*	integer	Indicates the maximum amount of time (in minutes) for all exchanges. The field shall have value greater or equals than 05.
reference_number	required*	string(32)	Identifies the vendor and version of the 3DS SDK that is integrated in a 3DS Requestor App, assigned by EMVCo when the 3DS SDK is approved. The field is limited to 32 characters.
recurring	optional		Additional recurring details.
expiration_date	optional	dd-mm-yyyy	A future date indicating the end date for any further subsequent transactions. For more information, go to 3DSv2 recurring params
frequency	optional	integer	Indicates the minimum number of days between subsequent transactions. An empty value indicates the payment frequency is not set.For more information, go to 3DSv2 recurring params

`required* = conditionally required`

3DS-METHOD PARAMS

`callback_url` - *optional*

> Please, make sure the **callback_url** can accept HTTP POST request and the 3DS-Method status is handled properly.

Notes: The `callback_url` is used in 3DSv2 scope is case a 3DS-Method is required to be submitted in asynchronous workflow. The 3DS-Method is about to be submitted in an iframe and the final HTTP POST request to the `callback_url` will be initiated inside the iframe target of the HTML form used for submitting the 3DS-Method.

Once the 3DS-Method reaches a final state, a callback will be sent via HTTP POST (**application/x-www-form-urlencoded**) with the following parameters:

```
unique_id=44177a21403427eb96664a6d7e5d5d48
&threeds_method_status=completed
&signature=c03a20929dcdd47c69c10b30b583425fd8a6122f5b369764a64dddb136d8ec556b16ef63d0a10541aa1ef64356ef99647d195f2f1ecc9e068033838efeb1b9de
```

The signature is a **SHA512** of the concatenated string: `unique_id`, `threeds_method_status` and the `password` (**f45ac65837d50dc26036a753e24dea9cd7d685e7**) used for the HTTP Basic authentication to the API.

For more detailed information about the 3DS-Method submission and the usage of the 3DS-Method `callback_url`, please take a look at the 3DSv2 authentication flow diagrams related to the asynchronous 3DS-Method submission.

CONTROL PARAMS

`challenge_indicator` - *optional*

Value	Description
no_preference *(default)*	Don't have any preferences related to the Challenge flow
no_challenge_requested	I prefer that a Challenge flow does not take place
preference	A request for the Challenge flow to take place
mandate	A Challenge flow must take place to fulfill a mandate

`device_type` - *required*

Value	Description
browser	Browser-based consumer interface. All the `browser` parameters are required.
application	Application-based consumer interface, mobile etc. All the `sdk` parameters are required.

`challenge_window_size` - *required**

The **challenge_window_size** is required when the **device_type** is set to **browser**

Notes: *Dimensions of the challenge window that has been displayed to the Cardholder. The ACS shall reply with content that is formatted to appropriately render in this window to provide the best possible consumer experience. Preconfigured sizes are width X height in pixels of the window displayed in the Cardholder browser window.*

Value	Description
250x400	Challenge window: width of `250px` and height of `400px`
390x400	Challenge window: width of `390px` and height of `400px`
500x600	Challenge window: width of `500px` and height of `600px`
600x400	Challenge window: width of `600px` and height of `400px`
full_screen	Challenge in a full screen

RECURRING PARAMS

All recurring params below are optional for asynchronousInitRecurringSale3d that is about to use the 3DSv2 authentication protocol.

All recurring params below are optional for the Web Payment Form that has the InitRecurringSale3d in **transaction_types** and is about to use the 3DSv2 authentication protocol.

`expiration_date` - *optional*

As a best practice, merchants should have a recurring expiry associated with all recurring transactions, but in cases like subscriptions where there is no established expiry or end date of recurring transactions, the param should be omitted.

Value	Description
05-08-2021	No further subsequent transactions are expected after that date.

`frequency` - *optional*

The **frequency** can be a positive number, not lower than **1** and not greater than **9999**. An empty value indicates the payment frequency is not set.

Value	Description
14	Indicates a minimum number of 14 days between subsequent recurring transactions.
30	Indicates a minimum number of 30 days *(monthly subscription)* between subsequent recurring transactions.

AUTHENTICATION FLOWS

There are two general workflows for 3DS 2.0, **Frictionless** Flow and **Challenge** Flow, as well as a 3DS1 Fallback Flow for circumstances where 3DS2 is not available or the authentication response gained via 3DS2 is not sufficient for obtaining a liability shift.

Transactions can fail prior to invoking the 3D mechanism (in case of e.g. invalid card number, expiry date or risk checks). In this case, the 3D transaction becomes synchronous.

If the card is not participating in 3DS and non-participating cards are allowed on the MID configuration, the async 3D transaction behaves like synchronous and proceeds with the authorization message.

Please, use only HTTP **GET** method in order to navigate consumer to any of the redirect URLs in the 3DS authentication scope. The other HTTP methods **POST**, **PUT**, etc are not supported for redirect URLs and won't be accepted for redirection. HTTP **POST** and **PUT** are accepted in other scenarios for the 3DS-Method.

FRICTIONLESS

A Frictionless Flow occurs when the Issuer authenticates the cardholder without cardholder involvement by evaluating the transaction's risk level.

The customer has more frictionless experience through the merchant's platform by not being challenged. That means the drop-off rate due to the 3DSecure protocol will be drastically reduced and the customer will happily come back to the merchant's platform.

The Frictionless Flow does not require further Cardholder interaction to achieve a successful authentication and complete the 3DSecure authentication process. The payment will be completely synchronous, the consumer won't be redirected to the Access Control Server to complete the authentication.

In order to enforce using the 3DSv2 authentication protocol, make sure to **include** the **threeds_v2_params** in the transaction request.

1.) The merchant submit a 3D transaction to the API including the 3DSecure v2 params

2.) No 3DSecure Method or 3DSecure Challenge is required by the card issuer, the transaction will be completed without further action.

3.) A synchronous payment response is returned to the merchant indicating the status of the payment.

An exemption from Strong Customer Authentication (SCA) can be requested by submitting an **exemption** with `low_risk` under SCA params.

In case the issuer accepts the exemption, a step up in the authentication flow might not be required because the transaction's risk analysis has already been performed by acquirer.

Note, the requested exemption might not be accepted due to internal risk validations.

For example, to be able to utilize the low risk exemption, the BIN country of the card must be part of the European Economic Area (EEA).

Furthermore, the acquirer could accept the merchant low-risk exemption request only if the transaction amount does not exceed the acquirer low-risk exemption threshold.

Finally, the ACS might not acknowledge the merchant/acquirer's exemption request and may still require a step up in the cardholder authentication.

Asynchronous 3 D Sv2 Frictionless Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4012000000060085')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4012000000060085");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": 100,
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4012000000060085",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
```

```
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4012000000060085</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <recurring>
      <expiration_date>05-08-2021</expiration_date>
      <frequency>30</frequency>
    </recurring>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```


Frictionless Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => approved
    [mode] => test
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:32.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
)
```

```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[approved]>
    <mode content=[test]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <timestamp content=[2021-02-04T15:26:32Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
]>
```

```
{
    transaction_type: "init_recurring_sale3d",
    status: "approved",
    mode: "test",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    timestamp: "2021-02-04T15:26:32Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>approved</status>
  <mode>test</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <timestamp>2021-02-04T15:26:32Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
</payment_transaction>
```

DIAGRAM

Merchant
...
<status>error</status>
...
</payment_response>
NO
Card valid?
YES
Acquire
Enrollment status
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
3DS Server
Enrollment status
provided
NO
Enrolled?
YES
Merchant
<payment_response>
...
<status>error / declined</status>
...
</payment_response>
NO
Authorization
allowed?
YES
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
MPI Params
provided
Gateway
Store MPI params
Merchant
<payment_response>
...
<status>error / declined</status>
...
</payment_response>
NO
Authenticated?
YES
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
Process
Transaction
Gateway
Merchant
<payment_response>
...
<status>declined</status>
...
</payment_response>
NO
Transaction
successful?
YES

RECONCILE

Once the transaction reaches the final state, a single reconcile can also be performed to retrieve more detailed information about the 3D transaction. It should include information about the 3DS transaction as described in the reconcile request/response below, on the right.

Reconcile 3 D Transaction By Unique Id Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('44177a21403427eb96664a6d7e5d5d48');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("44177a21403427eb96664a6d7e5d5d48");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "44177a21403427eb96664a6d7e5d5d48"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  </reconcile>'
```

Successful Reconciliation Of Frictionless 3 D Sv2 Transaction Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [mode] => test
    [timestamp] => 2021-02-04T15:26:33Z
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [card_brand] => visa
    [card_number] => 401200...0085
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [threeds] => {:authentication_flow=>"frictionless", :protocol=>{:target_version=>"2", :concrete_version=>"2"}}
)
```

```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[test]>
    <timestamp content=[2021-02-04T15:26:33Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[401200...0085]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <threeds content=[{:authentication_flow=>"frictionless", :protocol=>{:target_version=>"2", :concrete_version=>"2"}}]>
]>
```

```
{
    transaction_type: "init_recurring_sale3d",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "119643250547501c79d8295",
    mode: "test",
    timestamp: "2021-02-04T15:26:33Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    card_brand: "visa",
    card_number: "401200...0085",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    threeds: "{:authentication_flow=>"frictionless", :protocol=>{:target_version=>"2", :concrete_version=>"2"}}",
}
```



```
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <mode>test</mode>
  <timestamp>2021-02-04T15:26:33Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>401200...0085</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <threeds>
    <authentication_flow>frictionless</authentication_flow>
    <protocol>
      <target_version>2</target_version>
      <concrete_version>2</concrete_version>
    </protocol>
  </threeds>
</payment_response>
```


Successful Reconcile Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway

Parameter	Type	Description
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
threeds		
authentication_flow	string(255)	Identifies the concrete authentication flow of the 3DS transaction that it has gone through. It will be included only if the transaction reaches the final state. The possible values for 3DSv1 are **payer_authentication**. The possible values for 3DSv2 are **frictionless**, **challenge**, **fallback**.
protocol		
target_version	integer	Identifies the requested version of the 3DS authentication protocol to be used. The possible values are **1**, **2**.
concrete_version	integer	Identifies the concrete version of the 3DS authentication protocol that the transaction has been processed through. The possible values are **1**, **2**.

NOTIFICATION

Once the transaction reaches final state, a notification will be sent to the `notification_url` submitted in the initial transaction request. For more information, go to Asynchronous Transactions and Notifications.

Notification Example for frictionless flow

```
?transaction_id=119643250547501c79d8295
&unique_id=44177a21403427eb96664a6d7e5d5d48
&transaction_type=init_recurring_sale3d
&terminal_token=394f2ebc3646d3c017fa1e1cbc4a1e20
&status=approved
&amount=100
&signature=088e16a1019277b15d58faf0541e11910eb756f6
&eci=05
&avs_response_code=5I
&avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=frictionless
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=2
```

3DS Attributes

Name	Type	Description
threeds_authentication_flow	string	Identifies the concrete 3DS authentication flow that the transaction has gone through. It will be available in the notification only if the consumer has finished the 3DS authentication with the issuer. The value for 3DSv1 will be payer_authentication. The available values for 3DSv2 are frictionless, challenge and fallback.
threeds_method_status	string	Identifies the status of the 3DS-Method in the scope of 3DSv2 authentication protocol. The possible values are **required**, **in_progress** and **completed**.
threeds_target_protocol_version	string(1)	Identifies the 3DS protocol that has been enforced. The possible values are **1**, **2**. In case it's **2**, you are integrated with the 3DSv2 authentication protocol, otherwise with 3DSv1.
threeds_concrete_protocol_version	string(1)	Identifies the concrete 3DS protocol version that the transaction has gone through. The possible values are **1**, **2**. The value will be **1** in case of 3DSv1 authentication protocol used or a fallback from 3DSv2 to 3DSv1 has happened

Please have in mind, the above 3DS related params will be available for all transactions supporting 3DS in async workflow Authorize3d, Sale3d, or InitRecurringSale3d. For more information about the 3DS transactions, go to 3DS Card.

FRICTIONLESS WITH 3DSECURE METHOD

A Frictionless Flow occurs when the Issuer authenticates the cardholder without cardholder involvement by evaluating the transaction's risk level.

The customer has more frictionless experience through the merchant's platform by not being challenged. That means the drop-off rate due to the 3DSecure protocol will be drastically reduced and the customer will happily come back to the merchant's platform.

The Frictionless Flow does not require further Cardholder interaction to achieve a successful authentication and complete the 3DSecure authentication process. The payment will be completely synchronous, the consumer won't be redirected to the Access Control Server to complete the authentication.

In order to enforce using the 3DSv2 authentication protocol, make sure to **include** the **threeds_v2_params** in the transaction request.

This flow is treated frictionless (without consumer interaction with the issuer), but with the only difference that the ACS requires a 3DSecure Method to be submitted before continuing.

Thanks to risk-based authentication performed in the ACS, frictionless flow allows issuers to approve a transaction without the need to interact with the consumer.

When the customer makes an online purchase they would add an item to their shopping cart, fill out the normal purchase information and then proceed to confirm the purchase.

Details of the purchase including device data, item purchased and value are submitted to the ACS server to determine the authenticity of the cardholder.

The ACS will then screen it with the risk-based elements. If the risk is deemed to be low, the ACS can authenticate the customer passively and not bother them with the extra confirmation.

This is a frictionless process for the customer as it happens behind the scenes. They are directed straight to the purchase confirmation screen, without even knowing that their transaction was screened.

> An exemption from Strong Customer Authentication (SCA) can be requested by submitting an **exemption** with `low_risk` under SCA params.
>
> In case the issuer accepts the exemption, a step up in the authentication flow might not be required because the transaction's risk analysis has already been performed by acquirer.
>
> Note, the requested exemption might not be accepted due to internal risk validations.
>
> For example, to be able to utilize the low risk exemption, the BIN country of the card must be part of the European Economic Area (EEA).
>
> Furthermore, the acquirer could accept the merchant low-risk exemption request only if the transaction amount does not exceed the acquirer low-risk exemption threshold.
>
> Finally, the ACS might not acknowledge the merchant/acquirer's exemption request and may still require a step up in the cardholder authentication.

Asynchronous 3DS Method submission

A link between the customer's browser and the card issuer must be opened with a hidden iframe. It is used for the card issuer to load JavaScript which gathers device information to be returned to the card issuer. The next step after initiating the iframe, is to submit an API call to the `threeds_method_continue_url` using **HTTP PUT**, to retrieve the next step in the authentication. The API request won't require HTTP basic authentication, but a proper **signature** needs to be included to prove the authenticity of the request. The response of this API call will be the same as the normal 3D transaction processing API response, but with the only difference that an additional interaction with the issuer might be requested.

The asynchronous submission of the 3DS-Method might look difficult to achieve, but mitigates the risk of potential transaction processing interruptions, because the consumer redirection does not depend on a successful 3DS-Method submission. A continuation of the 3DS-Method might be requested regardless of the 3DS-Method submission result. It's a responsibility of the ACS then to take the appropriate decision how to continue with the authentication.

In order to simulate this authentication flow, use a test card 4066330000000004 for frictionless flow that requires 3DS-Method and submit a 3DSv2 transaction in asynchronous workflow by including the `threeds_v2_params`.

The response of the API will indicate that further action is required:

- `status` - **pending_async**
- `threeds_method_url` - the URL action where the 3DS-Method needs to be submitted using HTTP POST
- `threeds_method_continue_url` - API endpoint that accepts HTTP PUT requests with a signature and returns transaction API response identifying what the next step is *(transaction completed or consumer interaction is needed)*

In order to submit a 3DS-Method, you need to create a hidden iframe in the consumer browser (client side) with an `html` and `body` tags as described below, on the right side and create a hidden **HTML form** that:

- targets the iframe
- uses HTTP METHOD **POST** - `method="post"`
- has an **action** equivalent to the value of `threeds_method_url`, received from the response of the initial transaction request
- has 2 hidden inputs
  - `unique_id` - equivalent to the value of the `unique_id`, received from the response of the initial transaction request
  - `signature` - **SHA512** of a concatenated string (**unique_id**, **amount**, **timestamp**, **merchant_api_password**), where **unique_id**, **amount**, **timestamp** can be taken from the response of the initial transaction request and **merchant_api_password** is the password used for HTTP Basic authentication to the API during the initial transaction request
- submit the HTML form in the background using JavaScript

Once the 3DS-Method submission is initiated, a callback via HTTP POST will be done inside the iframe when the 3DS-Method reaches the final state. The 3DS-Method callback will be sent to the `callback_url` (submitted in the 3DSv2 request params as described in the diagram below) and will be constructed as described below:

- with request headers
  - `Content-Type` - **application/x-www-form-urlencoded**
- with POST request params
  - `unique_id` - the exact **unique_id** of the transaction in the initial transaction request
  - `threeds_method_status` - the status of the 3DS-Method submission, expect a value of **completed**
  - `signature` - **SHA512** of a concatenated string with the values of **unique_id**, **threeds_method_status**, and **merchant_api_password** where **unique_id** and **threeds_method_status** are POST params and **merchant_api_password** is the password used for HTTP HTTP Basic authentication to the API during the initial transaction request

The callback above can be handled *(optional)* in order to get informed of the 3DS-Method status, whether it has completed or not.

> In case you have implemented the 3DS-Method callback handler (it's not required), make sure you validate the signature before storing the 3DS-Method status as described above.

Right after submitting the 3DS-Method *(without waiting for the 3DS-Method completion)*, submit a 3DS-Method continue API call to determine what the next step that is required *(as described in the diagram below)*:

- no further action - payment successful / failed
- consumer <--> Issuer interaction needed

In order to submit the 3DS-Method continue call, please make sure to follow the steps, as described below in the diagram:

Submit an API call using HTTP METHOD **PUT** to the URL returned in `threeds_method_continue_url` during the initial transaction request:

- with request headers
  - `Content-Type` - **application/x-www-form-urlencoded**
- with request params
  - `signature` - the same signature used for submitting the 3DS-Method

The response of the API call will be transaction response XML indicating what is expected:

- no action, the `status` will be in final state *(authentication completed without friction and authorization has been performed)*
- consumer redirection, the `status` will be **pending_async** *(consumer interaction with the the issuer needed to complete the authentication)*

> Please, be aware that in case of improper **signature** submitted, the API will return HTTP status **400 Bad Request** and empty response.

Asynchronous 3 D Sv2 Frictionless With 3 Ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4066330000000004')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4066330000000004");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": 100,
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4066330000000004",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>init_recurring_sale3d</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
```

```
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4066330000000004</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <recurring>
      <expiration_date>05-08-2021</expiration_date>
      <frequency>30</frequency>
    </recurring>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```


Frictionless With 3 Ds Method Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => pending_async
    [mode] => test
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [threeds_method_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method
    [threeds_method_continue_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:33.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[pending_async]>
    <mode content=[test]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <threeds_method_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method]>
    <threeds_method_continue_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48]>
    <timestamp content=[2021-02-04T15:26:33Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "init_recurring_sale3d",
    status: "pending_async",
    mode: "test",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    threeds_method_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method",
    threeds_method_continue_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48",
    timestamp: "2021-02-04T15:26:33Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>pending_async</status>
  <mode>test</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <threeds_method_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method</threeds_method_url>
  <threeds_method_continue_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48</threeds_method_continue_url>
  <timestamp>2021-02-04T15:26:33Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

```html
<!-- Sample HTML for the 3DS-Method submission in an iframe -->
<html>
    <head>
    </head>

    <body onload="submitThreedsMethod()">
        <iframe width="..." height="..." id="threeDSMethodIframe" name="threeDSMethodIframe">
            <html>
              <body>
              </body>
            </html>
        </iframe>

        <form id ="threeDSMethodForm" name="threeDSMethodForm"
              enctype="application/x-www-form-urlencoded;charset=UTF-8"
              style="display: none"
              method="post"
              action="https://staging.gate.e-comprocessing.net/threeds/threeds_method"
              target="threeDSMethodIframe">
            <input type="hidden" name="unique_id" value="44177a21403427eb96664a6d7e5d5d48" />
            <!-- The signature is built as per the above notes for merchant with API password f45ac65837d50dc26036a753e24dea9cd7d685e7 -->
            <input type="hidden" name="signature" value="9b2233e89bbc6ec474e4f248282fb99123901e96858de2be30bbe505b53938fcdb1322b39081ed6566508b7002744bec14d079bef4563c4a86021e2aceef4f0a" />
        </form>
    </body>

    <script>

        function submitThreedsMethod() {
            threeDSMethodForm = document.getElementById('threeDSMethodForm');
            threeDSMethodForm.submit();
        }

    </script>

</html>
```

```
<!-- 3DS-Method Callback inside the iframe indicating the 3DS-Method completed -->
<!-- Content-Type: application/x-www-form-urlencoded -->
<!-- The signature is built as per the above notes for merchant with API password f45ac65837d50dc26036a753e24dea9cd7d685e7 -->

POST https://www.example.com/threeds/threeds_method/callback

unique_id=44177a21403427eb96664a6d7e5d5d48
&threeds_method_status=completed
&signature=c03a20929dcdd47c69c10b30b583425fd8a6122f5b369764a64dddb136d8ec556b16ef63d0a10541aa1ef64356ef99647d195f2f1ecc9e068033838efeb1b9de
```

```
<!-- 3DS-Method continue API call -->
<!-- Content-Type: application/x-www-form-urlencoded -->
<!-- The signature is built as per the above notes for merchant with API password f45ac65837d50dc26036a753e24dea9cd7d685e7 -->

curl https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48 \
   -X PUT \
   -H "Content-Type: application/x-www-form-urlencoded" \
   -d signature=9b2233e89bbc6ec474e4f248282fb99123901e96858de2be30bbe505b53938fcdb1322b39081ed6566508b7002744bec14d079bef4563c4a86021e2aceef4f0a
```

3 Ds Method Continue Successful Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => approved
    [mode] => test
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:33.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => true
    [scheme_transaction_identifier] => 019091214161031
    [scheme_settlement_date] => 0205
)
```

```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[approved]>
    <mode content=[test]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <timestamp content=[2021-02-04T15:26:33Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[true]>
    <scheme_transaction_identifier content=[019091214161031]>
    <scheme_settlement_date content=[0205]>
]>
```

```
{
    transaction_type: "init_recurring_sale3d",
    status: "approved",
    mode: "test",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    timestamp: "2021-02-04T15:26:33Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "true",
    scheme_transaction_identifier: "019091214161031",
    scheme_settlement_date: "0205",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>approved</status>
  <mode>test</mode>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <timestamp>2021-02-04T15:26:33Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>true</sent_to_acquirer>
  <scheme_transaction_identifier>019091214161031</scheme_transaction_identifier>
  <scheme_settlement_date>0205</scheme_settlement_date>
</payment_transaction>
```

A completion response will be returned by the API providing the status of the transaction. It might also be `approved`, `declined` or `error` depending on the authentication status and the authorization response.

DIAGRAM

Acquire
Enrollment status
3DS Server
Enrollment status
provided
Enrolled?
NO
YES
Authorization
allowed?
NO
YES
Merchant
<payment_response>
...
<status>error / declined</status>
...
</payment_response>
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
Process
Transaction
Gateway
Transaction
successful?
NO
YES
Merchant
<payment_response>
...
<status>declined</status>
...
</payment_response>
Merchant
<payment_response>
...
<status>approved</status>
...
</payment_response>
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
3DS-Method
required
Merchant
<payment_response>
...
<status>pending_async</status>
<unique_id>...</unique_id>
<threeds_method_url> 3ds_method_url</...>
<threeds_method_continue_url>api_call_continue_url</...>
...
</payment_response>
Gateway
1
1st action:
3DS-Method
submission
2

2nd action
Continue
after
3DS-Method
submission
is initiated

*Build an **iframe** and submit the 3DS-Method inside a form*
*by targeting the iframe and using **HTTP POST***
(invisible to the consumer)

```
<iframe width="xxx" height="xxx" style="..."

        id="threeDSMethodIframe" name="threeDSMethodIframe">

  <html>
    <body></body>
  </html>
</iframe>

...

<form name="threeDSMethodForm" id ="threeDSMethodForm" method="post"
      enctype="application/x-www-form-urlencoded;charset=UTF-8"
      style="display: none"
      action="{threeds_method_url}"
      target="threeDSMethodIframe">
  <input type="hidden" name="unique_id" value="{unique_id}" />
  <input type="hidden" name="signature" value="SHA512(...)" />
</form>

...

<script>

    function submitThreedsMethod() {
        document.getElementById('threeDSMethodForm').submit();
    }

</script>
```

Initiate
3DS-Method
(submitThreedsMethod)

Gateway

Signature valid?

NO → *400* ***Bad Request*** *(no response body)* → **Merchant**

YES

3DS-Method required?

NO → *400* ***Bad Request*** *(no response body)* → **Merchant**

YES

Gateway

Acquire
3DS-Method Content
(HTTP POST)

Access Control Server (ACS)

3DS-Method content
(HTML + JS)
provided
Gateway
Render
3DS-Method content
(HTML + JS)
Merchant
(iframe)
Automatic
3DS-Method form submission
(HTTP POST)
Access Control
Server (ACS)
Callback
(HTTP POST)
3DS Server
Callback
(HTTP POST)
Gateway
Transition
3DS-Method status
to Completed
Gateway
callback_url
submitted?
NO
200 OK
(no response body)
Merchant
(iframe)
YES
No further action needed
(3DS-Method completed)
Merchant
(iframe)
Callback
(HTTP POST)
POST {threeds_method_callback_url}?
unique_id={unique-id-
here}&threeds_method_status=completed
&signature={SHA512(...)}
Validate
Signature
Merchant
(iframe)
Handle 3DS-Method

status
AUTOMATED 3DS-METHOD SUBMISSION (IFRAME)
Merchant
API call (HTTP PUT)
PUT {threeds_method_continue_url}?signature={SHA512(...)}
Gateway
Merchant
400
Bad Request
(no response body)
NO
Signature valid?
YES
Acquire MPI params
3DS Server
Provide MPI Params
Gateway
Store MPI params
Merchant
<payment_response>
...
<status>error I declined</status>
...
</payment_response>
NO
Authenticated?
YES
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
Process
Transaction
Gateway
Merchant
<payment_response>
...
<status>declined</status>
...
</payment_response>
NO
Transaction successful?
YES
Merchant
<payment_response>
...
<status>approved</status>
...
</payment_response>

RECONCILE

Once the transaction reaches the final state, a single reconcile can also be performed to retrieve more detailed information about the 3D transaction. It should include information about the 3DS transaction as described in the reconcile request/response below, on the right.

Reconcile 3 D Transaction By Unique Id Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('44177a21403427eb96664a6d7e5d5d48');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("44177a21403427eb96664a6d7e5d5d48");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```ruby
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "44177a21403427eb96664a6d7e5d5d48"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  </reconcile>'
```

Successful Reconciliation Of Frictionless 3 D Sv2 Transaction With 3 Ds Method Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [mode] => test
    [timestamp] => 2021-02-04T15:26:33Z
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [card_brand] => visa
    [card_number] => 406633...0004
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [threeds] => {:authentication_flow=>"frictionless", :threeds_method=>{:status=>"completed"}, :protocol=>{:target_version=>"2", :concrete_version=>"2"}}
)
```

```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[test]>
    <timestamp content=[2021-02-04T15:26:33Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[406633...0004]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <threeds content=[{:authentication_flow=>"frictionless", :threeds_method=>{:status=>"completed"}, :protocol=>{:target_version=>"2", :concrete_version=>"2"}}]>
]>
```

```
{
    transaction_type: "init_recurring_sale3d",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "119643250547501c79d8295",
    mode: "test",
    timestamp: "2021-02-04T15:26:33Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    card_brand: "visa",
    card_number: "406633...0004",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    threeds: "{:authentication_flow=>"frictionless", :threeds_method=>{:status=>"completed"}, :protocol=>{:target_version=>"2", :concrete_version=>"2"}}",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <mode>test</mode>
  <timestamp>2021-02-04T15:26:33Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>406633...0004</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <threeds>
    <authentication_flow>frictionless</authentication_flow>
    <threeds_method>
      <status>completed</status>
    </threeds_method>
    <protocol>
      <target_version>2</target_version>
      <concrete_version>2</concrete_version>
    </protocol>
  </threeds>
</payment_response>
```


Successful Reconcile Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
threeds		
authentication_flow	string(255)	Identifies the concrete authentication flow of the 3DS transaction that it has gone through. It will be included only if the transaction reaches the final state. The possible values for 3DSv1 are **payer_authentication**. The possible values for 3DSv2 are **frictionless**, **challenge**, **fallback**.
threeds_method		
status	string(255)	Identifies the current status of 3DSv2-Method. The possible values are **required**, **in_progress**, **completed**.
protocol		
target_version	integer	Identifies the requested version of the 3DS authentication protocol to be used. The possible values are **1**, **2**.

Parameter	Type	Description
concrete_version	integer	Identifies the concrete version of the 3DS authentication protocol that the transaction has been processed through. The possible values are **1**, **2**.

NOTIFICATION

Once the transaction reaches final state, a notification will be sent to the `notification_url` submitted in the initial transaction request. For more information, go to Asynchronous Transactions and Notifications.

Notification Example for frictionless flow with 3DS-Method

```
?transaction_id=119643250547501c79d8295
&unique_id=44177a21403427eb96664a6d7e5d5d48
&transaction_type=init_recurring_sale3d
&terminal_token=394f2ebc3646d3c017fa1e1cbc4a1e20
&status=approved
&amount=100
&signature=088e16a1019277b15d58faf0541e11910eb756f6
&eci=05
&avs_response_code=5I
&avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=frictionless
&threeds_method_status=completed
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=2
```

3DS Attributes

Name	Type	Description
threeds_authentication_flow	string	Identifies the concrete 3DS authentication flow that the transaction has gone through. It will be available in the notification only if the consumer has finished the 3DS authentication with the issuer. The value for 3DSv1 will be payer_authentication. The available values for 3DSv2 are frictionless, challenge and fallback.
threeds_method_status	string	Identifies the status of the 3DS-Method in the scope of 3DSv2 authentication protocol. The possible values are **required**, **in_progress** and **completed**.
threeds_target_protocol_version	string(1)	Identifies the 3DS protocol that has been enforced. The possible values are **1**, **2**. In case it's **2**, you are integrated with the 3DSv2 authentication protocol, otherwise with 3DSv1.
threeds_concrete_protocol_version	string(1)	Identifies the concrete 3DS protocol version that the transaction has gone through. The possible values are **1**, **2**. The value will be **1** in case of 3DSv1 authentication protocol used or a fallback from 3DSv2 to 3DSv1 has happened

Please have in mind, the above 3DS related params will be available for all transactions supporting 3DS in async workflow Authorize3d, Sale3d, or InitRecurringSale3d. For more information about the 3DS transactions, go to 3DS Card.

CHALLENGE

If the ACS determines that further Cardholder interaction is required to complete the authentication, the Frictionless Flow transitions into the Challenge Flow. For example, a challenge may be necessary because the transaction is deemed high-risk, is above certain thresholds, or requires a higher level of authentication due to country mandates (or regulations).

The Challenge Flow occurs when the issuer assesses the risk of the transaction during the frictionless flow and determines that the transaction requires additional cardholder authentication. The frictionless flow transitions into the challenge flow

In order to enforce using the 3DSv2 authentication protocol, make sure to **include** the **threeds_v2_params** in the transaction request.

An exemption from Strong Customer Authentication (SCA) can be requested by submitting an **exemption** with `low_risk` under SCA params.

In case the issuer accepts the exemption, a step up in the authentication flow might not be required because the transaction's risk analysis has already been performed by acquirer.

Note, the requested exemption might not be accepted due to internal risk validations.

For example, to be able to utilize the low risk exemption, the BIN country of the card must be part of the European Economic Area (EEA).

Furthermore, the acquirer could accept the merchant low-risk exemption request only if the transaction amount does not exceed the acquirer low-risk exemption threshold.

Finally, the ACS might not acknowledge the merchant/acquirer's exemption request and may still require a step up in the cardholder authentication.

Asynchronous 3 D Sv2 Challenge Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4918190000000002')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4918190000000002");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": 100,
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4918190000000002",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4918190000000002</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Challenge Response

```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => pending_async
    [mode] => test
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v2_challenge
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:34.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[pending_async]>
    <mode content=[test]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v2_challenge]>
    <timestamp content=[2021-02-04T15:26:34Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "authorize3d",
    status: "pending_async",
    mode: "test",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v2_challenge",
    timestamp: "2021-02-04T15:26:34Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <status>pending_async</status>
  <mode>test</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v2_challenge</redirect_url_type>
  <timestamp>2021-02-04T15:26:34Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

DIAGRAM

</threeds_v2_params>
</payment_transaction>
Merchant
<payment_response>
...
<status>error</status>
...
</payment_response>
NO
Card valid?
YES
Acquire
Enrollment status
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
3DS Server
Enrollment status
provided
NO
Enrolled?
YES
Merchant
<payment_response>
...
<status>error / declined</status>
...
</payment_response>
NO
Authorization
allowed?
YES
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
Process
Transaction
Gateway
Merchant
<payment_response>
...
<status>declined</status>
...
</payment_response>
NO
Transaction
successful?
YES
Merchant
<payment_response>
...
<status>approved</status>
...
</payment_response>
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
3DS-Challenge
required
Merchant
<payment_response>
...
<status>pending_async</status>
<redirect_url>3ds_challenge_url</redirect_url>
<redirect_url_type>3ds_v2_challenge</...>
Gateway

...
</payment_response>
Handle response
Merchant
Redirect consumer to
redirect_url
(HTTP GET)
Gateway
Acquire
Challenge Form
(HTTP POST)
Access Control
Server (ACS)
Challenge Form
provided
Consumer
Render Challenge
Gateway
Solve Challenge
(strong authentication)
Consumer
Consumer
interacts with the
issuer to
complete the
strong 3DS
authentication
Access Control
Server (ACS)
Solve Challenge
(strong authentication)
3DS-Challenge
Verify Challenge
Consumer
Render another
Challenge
YES
Challenge
again?
NO
Prepare Callback
(Challenge finished)
Access Control
Server (ACS)
Callback
(HTTP POST)
Gateway

RECONCILE

Once the transaction reaches the final state, a single reconcile can also be performed to retrieve more detailed information about the 3D transaction. It should include information about the 3DS transaction as described in the reconcile request/response below, on the right.

Reconcile 3 D Transaction By Unique Id Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('44177a21403427eb96664a6d7e5d5d48');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("44177a21403427eb96664a6d7e5d5d48");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "44177a21403427eb96664a6d7e5d5d48"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  </reconcile>'
```

Successful Reconciliation Of 3 D Sv2 Transaction With Challenge Response

```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [mode] => test
    [timestamp] => 2021-02-04T15:26:34Z
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [card_brand] => visa
    [card_number] => 491819...0002
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [threeds] => {:authentication_flow=>"challenge", :protocol=>{:target_version=>"2", :concrete_version=>"2"}}
)
```

```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[test]>
    <timestamp content=[2021-02-04T15:26:34Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[491819...0002]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <threeds content=[{:authentication_flow=>"challenge", :protocol=>{:target_version=>"2", :concrete_version=>"2"}}]>
]>
```

```
{
    transaction_type: "authorize3d",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "119643250547501c79d8295",
    mode: "test",
    timestamp: "2021-02-04T15:26:34Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    card_brand: "visa",
    card_number: "491819...0002",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    threeds: "{:authentication_flow=>"challenge", :protocol=>{:target_version=>"2", :concrete_version=>"2"}}",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize3d</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <mode>test</mode>
  <timestamp>2021-02-04T15:26:34Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>491819...0002</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <threeds>
    <authentication_flow>challenge</authentication_flow>
    <protocol>
      <target_version>2</target_version>
      <concrete_version>2</concrete_version>
    </protocol>
  </threeds>
</payment_response>
```


Successful Reconcile Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
threeds		
authentication_flow	string(255)	Identifies the concrete authentication flow of the 3DS transaction that it has gone through. It will be included only if the transaction reaches the final state. The possible values for 3DSv1 are **payer_authentication**. The possible values for 3DSv2 are **frictionless**, **challenge**, **fallback**.
protocol		
target_version	integer	Identifies the requested version of the 3DS authentication protocol to be used. The possible values are **1**, **2**.
concrete_version	integer	Identifies the concrete version of the 3DS authentication protocol that the transaction has been processed through. The possible values are **1**, **2**.

NOTIFICATION

Once the transaction reaches final state, a notification will be sent to the `notification_url` submitted in the initial transaction request. For more information, go to Asynchronous Transactions and Notifications.

Notification Example for challenge flow

```
?transaction_id=119643250547501c79d8295
&unique_id=44177a21403427eb96664a6d7e5d5d48
&transaction_type=authorize3d
&terminal_token=394f2ebc3646d3c017fa1e1cbc4a1e20
&status=approved
&amount=100
&signature=088e16a1019277b15d58faf0541e11910eb756f6
&eci=05
&avs_response_code=5I
&avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=challenge
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=2
```

3DS Attributes

Name	Type	Description
threeds_authentication_flow	string	Identifies the concrete 3DS authentication flow that the transaction has gone through. It will be available in the notification only if the consumer has finished the 3DS authentication with the issuer. The value for 3DSv1 will be payer_authentication. The available values for 3DSv2 are frictionless, challenge and fallback.
threeds_method_status	string	Identifies the status of the 3DS-Method in the scope of 3DSv2 authentication protocol. The possible values are **required**, **in_progress** and **completed**.
threeds_target_protocol_version	string(1)	Identifies the 3DS protocol that has been enforced. The possible values are **1**, **2**. In case it's **2**, you are integrated with the 3DSv2 authentication protocol, otherwise with 3DSv1.
threeds_concrete_protocol_version	string(1)	Identifies the concrete 3DS protocol version that the transaction has gone through. The possible values are **1**, **2**. The value will be **1** in case of 3DSv1 authentication protocol used or a fallback from 3DSv2 to 3DSv1 has happened

Please have in mind, the above 3DS related params will be available for all transactions supporting 3DS in async workflow Authorize3d, Sale3d, or InitRecurringSale3d. For more information about the 3DS transactions, go to 3DS Card.

CHALLENGE WITH 3DSECURE METHOD

If the ACS determines that further Cardholder interaction is required to complete the authentication, the Frictionless Flow transitions into the Challenge Flow. For example, a challenge may be necessary because the transaction is deemed high-risk, is above certain thresholds, or requires a higher level of authentication due to country mandates (or regulations).

The Challenge Flow occurs when the issuer assesses the risk of the transaction during the frictionless flow and determines that the transaction requires additional cardholder authentication. The frictionless flow transitions into the challenge flow

In order to enforce using the 3DSv2 authentication protocol, make sure to **include** the **threeds_v2_params** in the transaction request.

An exemption from Strong Customer Authentication (SCA) can be requested by submitting an **exemption** with `low_risk` under SCA params.

In case the issuer accepts the exemption, a step up in the authentication flow might not be required because the transaction's risk analysis has already been performed by acquirer.

Note, the requested exemption might not be accepted due to internal risk validations.

For example, to be able to utilize the low risk exemption, the BIN country of the card must be part of the European Economic Area (EEA).

Furthermore, the acquirer could accept the merchant low-risk exemption request only if the transaction amount does not exceed the acquirer low-risk exemption threshold.

Finally, the ACS might not acknowledge the merchant/acquirer's exemption request and may still require a step up in the cardholder authentication.

Asynchronous 3DS Method submission

A link between the customer's browser and the card issuer must be opened with a hidden iframe. It is used for the card issuer to load JavaScript which gathers device information to be returned to the card issuer. The next step after initiating the iframe, is to submit an API call to the `threeds_method_continue_url` using **HTTP PUT**, to retrieve the next step in the authentication. The API request won't require HTTP basic authentication, but a proper **signature** needs to be included to prove the authenticity of the request. The response of this API call will be the same as the normal 3D transaction processing API response, but with the only difference that an additional interaction with the issuer might be requested.

The asynchronous submission of the 3DS-Method might look difficult to achieve, but mitigates the risk of potential transaction processing interruptions, because the consumer redirection does not depend on a successful 3DS-Method submission. A continuation of the 3DS-Method might be requested regardless of the 3DS-Method submission result. It's a responsibility of the ACS then to take the appropriate decision how to continue with the authentication.

In order to simulate this authentication flow, use a test card 4938730000000001 for challenge flow that requires 3DS-Method and submit a 3DSv2 transaction in asynchronous workflow by including the `threeds_v2_params`.

The response of the API will indicate that further action is required:

- `status` - **pending_async**
- `threeds_method_url` - the URL action where the 3DS-Method needs to be submitted using HTTP POST
- `threeds_method_continue_url` - API endpoint that accepts HTTP PUT requests with a signature and returns transaction API response identifying what the next step is *(transaction completed or consumer interaction is needed)*

In order to submit a 3DS-Method, you need to create a hidden iframe in the consumer browser (client side) with an `html` and `body` tags as described below, on the right side and create a hidden **HTML form** that:

- targets the iframe
- uses HTTP METHOD **POST** - `method="post"`
- has an **action** equivalent to the value of `threeds_method_url`, received from the response of the initial transaction request
- has 2 hidden inputs
  - `unique_id` - equivalent to the value of the `unique_id`, received from the response of the initial transaction request
  - `signature` - **SHA512** of a concatenated string (**unique_id**, **amount**, **timestamp**, **merchant_api_password**), where **unique_id**, **amount**, **timestamp** can be taken from the response of the initial transaction request and **merchant_api_password** is the password used for HTTP Basic authentication to the API during the initial transaction request
- submit the HTML form in the background using JavaScript

Once the 3DS-Method submission is initiated, a callback via HTTP POST will be done inside the iframe when the 3DS-Method reaches the final state. The 3DS-Method callback will be sent to the `callback_url` (submitted in the 3DSv2 request params as described in the diagram below) and will be constructed as described below:

- with request headers
  - `Content-Type` - **application**/**x-www-form-urlencoded**
- with POST request params
  - `unique_id` - the exact **unique_id** of the transaction in the initial transaction request
  - `threeds_method_status` - the status of the 3DS-Method submission, expect a value of **completed**
  - `signature` - **SHA512** of a concatenated string with the values of **unique_id**, **threeds_method_status**, and **merchant_api_password** where **unique_id** and **threeds_method_status** are POST params and **merchant_api_password** is the password used for HTTP HTTP Basic authentication to the API during the initial transaction request

The callback above can be handled *(optional)* in order to get informed of the 3DS-Method status, whether it has completed or not.

> In case you have implemented the 3DS-Method callback handler (it's not required), make sure you validate the signature before storing the 3DS-Method status as described above.

Right after submitting the 3DS-Method *(without waiting for the 3DS-Method completion)*, submit a 3DS-Method continue API call to determine what the next step that is required *(as described in the diagram below)*:

- no further action - payment successful / failed
- consumer <--> Issuer interaction needed

In order to submit the 3DS-Method continue call, please make sure to follow the steps, as described below in the diagram:

Submit an API call using HTTP METHOD **PUT** to the URL returned in `threeds_method_continue_url` during the initial transaction request:

- with request headers
  - `Content-Type` - **application**/**x-www-form-urlencoded**
- with request params
  - `signature` - the same signature used for submitting the 3DS-Method

The response of the API call will be transaction response XML indicating what is expected:

- no action, the `status` will be in final state *(authentication completed without friction and authorization has been performed)*
- consumer redirection, the `status` will be **pending_async** *(consumer interaction with the the issuer needed to complete the authentication)*

> Please, be aware that in case of improper **signature** submitted, the API will return HTTP status **400 Bad Request** and empty response.

Asynchronous 3 D Sv2 Challenge With 3 Ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4938730000000001')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}')
        ->setThreedsPurchase('{"category"=>"service"}')
        ->setThreedsRecurring('{"expiration_date"=>"05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agent"
        ->setThreedsSdk('{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_ke


        // Sca Params
        ->setScaExemption('low_risk');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Authorize3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Authorize3DRequest request = new Authorize3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4938730000000001");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_


    // Sca Params
    request.setScaExemption("low_risk");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": 100,
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4938730000000001",
    "expiration_month": "12"
```

```
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    },
    "sca_params": {
      "exemption": "low_risk"
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4938730000000001</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
  <sca_params>
    <exemption>low_risk</exemption>
  </sca_params>
</payment_transaction>'
```

Challenge With 3 Ds Method Response

```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => pending_async
    [mode] => test
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [threeds_method_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method
    [threeds_method_continue_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:34.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[pending_async]>
    <mode content=[test]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <threeds_method_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method]>
    <threeds_method_continue_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48]>
    <timestamp content=[2021-02-04T15:26:34Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "authorize3d",
    status: "pending_async",
    mode: "test",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    threeds_method_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method",
    threeds_method_continue_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48",
    timestamp: "2021-02-04T15:26:34Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <status>pending_async</status>
  <mode>test</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <threeds_method_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method</threeds_method_url>
  <threeds_method_continue_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48</threeds_method_continue_url>
  <timestamp>2021-02-04T15:26:34Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

```html
<!-- Sample HTML for the 3DS-Method submission in an iframe -->
<html>
    <head>
    </head>

    <body onload="submitThreedsMethod()">
        <iframe width="..." height="..." id="threeDSMethodIframe" name="threeDSMethodIframe">
            <html>
              <body>
              </body>
            </html>
        </iframe>

        <form id ="threeDSMethodForm" name="threeDSMethodForm"
              enctype="application/x-www-form-urlencoded;charset=UTF-8"
              style="display: none"
              method="post"
              action="https://staging.gate.e-comprocessing.net/threeds/threeds_method"
              target="threeDSMethodIframe">
            <input type="hidden" name="unique_id" value="44177a21403427eb96664a6d7e5d5d48" />
            <!-- The signature is built as per the above notes for merchant with API password f45ac65837d50dc26036a753e24dea9cd7d685e7 -->
            <input type="hidden" name="signature" value="ea7ef95992d0333e68668f6b9c8c39c69f70f014e4a4d0adb7db2e681760c1ed6e21929b4ab7086a0b64ba59d5d3164113f647a217d6b042fa5d73db53ad665d" />
        </form>
    </body>

    <script>

        function submitThreedsMethod() {
            threeDSMethodForm = document.getElementById('threeDSMethodForm');
            threeDSMethodForm.submit();
        }

    </script>

</html>
```

```
<!-- 3DS-Method Callback inside the iframe indicating the 3DS-Method completed -->
<!-- Content-Type: application/x-www-form-urlencoded -->
<!-- The signature is built as per the above notes for merchant with API password f45ac65837d50dc26036a753e24dea9cd7d685e7 -->

POST https://www.example.com/threeds/threeds_method/callback

unique_id=44177a21403427eb96664a6d7e5d5d48
&threeds_method_status=completed
&signature=c03a20929dcdd47c69c10b30b583425fd8a6122f5b369764a64dddb136d8ec556b16ef63d0a10541aa1ef64356ef99647d195f2f1ecc9e068033838efeb1b9de
```

```
<!-- 3DS-Method continue API call -->
<!-- Content-Type: application/x-www-form-urlencoded -->
<!-- The signature is built as per the above notes for merchant with API password f45ac65837d50dc26036a753e24dea9cd7d685e7 -->

curl https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48 \
   -X PUT \
   -H "Content-Type: application/x-www-form-urlencoded" \
   -d signature=ea7ef95992d0333e68668f6b9c8c39c69f70f014e4a4d0adb7db2e681760c1ed6e21929b4ab7086a0b64ba59d5d3164113f647a217d6b042fa5d73db53ad665d
```

3 Ds Method Continue Response

```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => pending_async
    [mode] => test
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v2_challenge
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:34.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[pending_async]>
    <mode content=[test]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v2_challenge]>
    <timestamp content=[2021-02-04T15:26:34Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "authorize3d",
    status: "pending_async",
    mode: "test",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v2_challenge",
    timestamp: "2021-02-04T15:26:34Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>authorize3d</transaction_type>
  <status>pending_async</status>
  <mode>test</mode>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v2_challenge</redirect_url_type>
  <timestamp>2021-02-04T15:26:34Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

The consumer needs to be redirected to the Challenge `redirect_url` URL to complete the authentication with the ACS. Once the consumer completes all the challenges of the ACS provider, will be redirected either to `return_success_url` or `return_failure_url` depending on the challenge authentication status and authorization response as described in the diagram below.

DIAGRAM

Acquire
Enrollment status
3DS Server
Enrollment status
provided
Enrolled?
NO
YES
Authorization
allowed?
NO
YES
Merchant
<payment_response>
...
<status>error / declined</status>
...
</payment_response>
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
Process
Transaction
Gateway
Transaction
successful?
NO
YES
Merchant
<payment_response>
...
<status>declined</status>
...
</payment_response>
Merchant
<payment_response>
...
<status>approved</status>
...
</payment_response>
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
3DS-Method
required
Gateway
Merchant
<payment_response>
...
<status>pending_async</status>
<unique_id>...</unique_id>
<threeds_method_url> 3ds_method_url</...>
<threeds_method_continue_url>api_call_continue_url</...>
...
</payment_response>
1
1st action:
3DS-Method
submission
2

2nd action
Continue
after
3DS-Method
submission
is initiated

*Build an **iframe** and submit the 3DS-Method inside a form*
*by targeting the iframe and using **HTTP POST***
(invisible to the consumer)

```
<iframe width="xxx" height="xxx" style="..."

        id="threeDSMethodIframe" name="threeDSMethodIframe">

  <html>
    <body></body>
  </html>
</iframe>

...

<form name="threeDSMethodForm" id ="threeDSMethodForm" method="post"
      enctype="application/x-www-form-urlencoded;charset=UTF-8"
      style="display: none"
      action="{threeds_method_url}"
      target="threeDSMethodIframe">
  <input type="hidden" name="unique_id" value="{unique_id}" />
  <input type="hidden" name="signature" value="SHA512(...)" />
</form>

...

<script>

    function submitThreedsMethod() {
        document.getElementById('threeDSMethodForm').submit();
    }

</script>
```

Initiate
3DS-Method
(submitThreedsMethod)

Gateway

Signature valid?

NO → *400* ***Bad Request*** *(no response body)* → **Merchant**

YES

3DS-Method required?

NO → *400* ***Bad Request*** *(no response body)* → **Merchant**

YES

Gateway

Acquire
3DS-Method Content
(HTTP POST)

Access Control Server (ACS)

3DS-Method content
(HTML + JS)
provided
Merchant
(iframe)
Render
3DS-Method content
(HTML + JS)
Gateway
Automatic
3DS-Method form submission
(HTTP POST)
Access Control
Server (ACS)
Callback
(HTTP POST)
3DS Server
Callback
(HTTP POST)
Gateway
Transition
3DS-Method status
to Completed
Gateway
Merchant
(iframe)
200 OK
(no response body)
NO
callback_url
submitted?
YES
No further action needed
(3DS-Method completed)
Merchant
(iframe)
Callback
(HTTP POST)
POST {threeds_method_callback_url}?
unique_id={unique-id-
here}&threeds_method_status=completed
&signature={SHA512(...)}
Validate
Signature
Merchant
(iframe)
Handle 3DS-Method

status
AUTOMATED 3DS-METHOD SUBMISSION (IFRAME)
Merchant
API call (HTTP PUT)
PUT {threeds_method_continue_url}?signature={SHA512(...)}
Gateway
Merchant
400
Bad Request
(no response body)
NO
Signature valid?
YES
Acquire MPI params
3DS Server
Challenge required
Merchant
<payment_response>
...
<status>pending_async</status>
<redirect_url>3ds_v2_challenge_url</redirect_url>
<redirect_url_type>3ds_v2_challenge</redirect_url_type>
...
</payment_response>
Gateway
Handle response
Merchant
Redirect consumer to redirect_url (HTTP GET)
Gateway
Acquire Challenge Form (HTTP POST)
Access Control Server (ACS)
Challenge Form provided
Consumer
Render Challenge
Gateway
Solve Challenge (strong authentication)
Consumer
Consumer interacts with the issuer to complete the strong 3DS authentication
Access Control Server (ACS)

3DS-Challenge
Solve Challenge
(strong authentication)
Verify Challenge
Consumer
Render another
Challenge
YES
Challenge
again?
NO
Prepare Callback
(Challenge finished)
Access Control
Server (ACS)
Callback
(HTTP POST)
Gateway
Acquire MPI params
3DS Server
MPI Params
provided
Gateway
Store MPI params
Merchant
Back to
merchant
Consumer
Redirect consumer to
return_failure_url
(HTTP GET)
NO
Authenticated?
YES
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
Process
Transaction
Gateway

RECONCILE

Once the transaction reaches the final state, a single reconcile can also be performed to retrieve more detailed information about the 3D transaction. It should include information about the 3DS transaction as described in the reconcile request/response below, on the right.

Reconcile 3 D Transaction By Unique Id Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('44177a21403427eb96664a6d7e5d5d48');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("44177a21403427eb96664a6d7e5d5d48");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "44177a21403427eb96664a6d7e5d5d48"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  </reconcile>'
```

Successful Reconciliation Of 3 D Sv2 Transaction With Challenge And 3 Ds Method Response

```
stdClass Object
(
    [transaction_type] => authorize3d
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [mode] => test
    [timestamp] => 2021-02-04T15:26:35Z
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [card_brand] => visa
    [card_number] => 493873...0001
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [threeds] => {:authentication_flow=>"challenge", :threeds_method=>{:status=>"completed"}, :protocol=>{:target_version=>"2", :concrete_version=>"2"}}
)
```

```
<payment_response content=[
    <transaction_type content=[authorize3d]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[test]>
    <timestamp content=[2021-02-04T15:26:35Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[493873...0001]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <threeds content=[{:authentication_flow=>"challenge", :threeds_method=>{:status=>"completed"}, :protocol=>{:target_version=>"2", :concrete_version=>"2"}}]>
]>
```

```
{
    transaction_type: "authorize3d",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "119643250547501c79d8295",
    mode: "test",
    timestamp: "2021-02-04T15:26:35Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    card_brand: "visa",
    card_number: "493873...0001",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    threeds: "{:authentication_flow=>"challenge", :threeds_method=>{:status=>"completed"}, :protocol=>{:target_version=>"2", :concrete_version=>"2"}}",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>authorize3d</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <mode>test</mode>
  <timestamp>2021-02-04T15:26:35Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>493873...0001</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <threeds>
    <authentication_flow>challenge</authentication_flow>
    <threeds_method>
      <status>completed</status>
    </threeds_method>
    <protocol>
      <target_version>2</target_version>
      <concrete_version>2</concrete_version>
    </protocol>
  </threeds>
</payment_response>
```


Successful Reconcile Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z

Parameter	Type	Description
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
threeds		
authentication_flow	string(255)	Identifies the concrete authentication flow of the 3DS transaction that it has gone through. It will be included only if the transaction reaches the final state. The possible values for 3DSv1 are **payer_authentication**. The possible values for 3DSv2 are **frictionless**, **challenge**, **fallback**.
threeds_method		
status	string(255)	Identifies the current status of 3DSv2-Method. The possible values are **required**, **in_progress**, **completed**.
protocol		
target_version	integer	Identifies the requested version of the 3DS authentication protocol to be used. The possible values are **1**, **2**.
concrete_version	integer	Identifies the concrete version of the 3DS authentication protocol that the transaction has been processed through. The possible values are **1**, **2**.

NOTIFICATION

Once the transaction reaches final state, a notification will be sent to the `notification_url` submitted in the initial transaction request. For more information, go to Asynchronous Transactions and Notifications.

Notification Example for challenge flow with 3DS-Method

```
?transaction_id=119643250547501c79d8295
&unique_id=44177a21403427eb96664a6d7e5d5d48
&transaction_type=authorize3d
&terminal_token=394f2ebc3646d3c017fa1e1cbc4a1e20
&status=approved
&amount=100
&signature=088e16a1019277b15d58faf0541e11910eb756f6
&eci=05
&avs_response_code=5I
&avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=challenge
&threeds_method_status=completed
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=2
```

3DS Attributes

Name	Type	Description
threeds_authentication_flow	string	Identifies the concrete 3DS authentication flow that the transaction has gone through. It will be available in the notification only if the consumer has finished the 3DS authentication with the issuer. The value for 3DSv1 will be payer_authentication. The available values for 3DSv2 are frictionless, challenge and fallback.
threeds_method_status	string	Identifies the status of the 3DS-Method in the scope of 3DSv2 authentication protocol. The possible values are **required**, **in_progress** and **completed**.
threeds_target_protocol_version	string(1)	Identifies the 3DS protocol that has been enforced. The possible values are **1**, **2**. In case it's **2**, you are integrated with the 3DSv2 authentication protocol, otherwise with 3DSv1.
threeds_concrete_protocol_version	string(1)	Identifies the concrete 3DS protocol version that the transaction has gone through. The possible values are **1**, **2**. The value will be **1** in case of 3DSv1 authentication protocol used or a fallback from 3DSv2 to 3DSv1 has happened

Please have in mind, the above 3DS related params will be available for all transactions supporting 3DS in async workflow Authorize3d, Sale3d, or InitRecurringSale3d. For more information about the 3DS transactions, go to 3DS Card.

FALLBACK

A 3DSecure Fallback Flow is possible for circumstances where 3DSv2 is not available or the authentication response gained via 3DSv2 is not sufficient for obtaining a liability shift. Another possibility for the authentication to be downgraded to 3DSv1 could be a card not-enrolled in the 3DSv2 service, but a a record exists in the 3DSv1 system.

In order to enforce using the 3DSv2 authentication protocol, make sure to **include** the **threeds_v2_params** in the transaction request.

Asynchronous 3 D Sv2 Fallback Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Recurring\InitRecurringSale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4901170000000003')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"="https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"="browser", "challenge_window_size"="full_screen", "challenge_indicator"="preference"}')
        ->setThreedsPurchase('{"category"="service"}')
        ->setThreedsRecurring('{"expiration_date"="05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"="verified_address", "delivery_timeframe"="electronic", "reorder_items_indicator"="reordered", "pre_order_purchase_indicator"="merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"="05-02-2020", "update_indicator"="more_than_60days", "last_change_date"="05-11-2020", "password_change_indicator"="no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"="*/*", "java_enabled"="false", "language"="en-GB", "color_depth"="24", "screen_height"="900", "screen_width"="1440", "time_zone_offset"="-120", "user_agent"
        ->setThreedsSdk('{"interface"="native", "ui_types"={"ui_type"="multi_select"}, "application_id"="fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"="encrypted-data-here", "ephemeral_public_ke

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.recurring.InitRecurringSale3D;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    InitRecurringSale3D request = new InitRecurringSale3D();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4901170000000003");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_dat
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.init_recurring_sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": 100,
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4901170000000003",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987"
```

```
    "customer_phone": "19879879879",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4901170000000003</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <recurring>
      <expiration_date>05-08-2021</expiration_date>
      <frequency>30</frequency>
    </recurring>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
</payment_transaction>'
```

Fallback Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => pending_async
    [mode] => test
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v1_payer_authentication
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:35.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[pending_async]>
    <mode content=[test]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v1_payer_authentication]>
    <timestamp content=[2021-02-04T15:26:35Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "init_recurring_sale3d",
    status: "pending_async",
    mode: "test",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v1_payer_authentication",
    timestamp: "2021-02-04T15:26:35Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>pending_async</status>
  <mode>test</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v1_payer_authentication</redirect_url_type>
  <timestamp>2021-02-04T15:26:35Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

DIAGRAM

...
</threeds_v2_params>
</payment_transaction>
Merchant
<payment_response>
...
<status>error</status>
...
</payment_response>
NO
Card valid?
YES
Acquire
Enrollment status
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
3DS Server
Enrollment status
provided
NO
Enrolled?
YES
Merchant
<payment_response>
...
<status>error / declined</status>
...
</payment_response>
NO
Authorization
allowed?
YES
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
Process
Transaction
Gateway
Merchant
<payment_response>
...
<status>declined</status>
...
</payment_response>
NO
Transaction
successful?
YES
Merchant
<payment_response>
...
<status>approved</status>
...
</payment_response>
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
Payer Authentication
(fallback to 3DSv1)
required
<payment_response>
...
<status>pending_async</status>

Merchant
Gateway
<redirect_url_type>3ds_v1_payer_authentication</...>
...
</payment_response>
Handle response
Merchant
Redirect consumer to
redirect_url
(HTTP GET)
Gateway
Acquire
Payer authentication
Form
(HTTP POST)
Access Control
Server (ACS)
Authentication Form
provided
Consumer
Render
Authentication form
Gateway
Complete the 2FA
PAYER AUTHENTICATION
(FALLBACK TO 3DSv1)
Consumer
Submit
Authentication
form
(HTTP POST)
Access Control
Server (ACS)
Verify
Authentication
Access Control
Server (ACS)
Callback
(HTTP POST)
Gateway
Acquire MPI params
3DS Server
MPI params
provided

RECONCILE

Once the transaction reaches the final state, a single reconcile can also be performed to retrieve more detailed information about the 3D transaction. It should include information about the 3DS transaction as described in the reconcile request/response below, on the right.

Reconcile 3 D Transaction By Unique Id Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('44177a21403427eb96664a6d7e5d5d48');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("44177a21403427eb96664a6d7e5d5d48");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "44177a21403427eb96664a6d7e5d5d48"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  </reconcile>'
```

Successful Reconciliation Of 3 D Sv2 Transaction With Fallback To 3 D Sv1 Response

```
stdClass Object
(
    [transaction_type] => init_recurring_sale3d
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [mode] => test
    [timestamp] => 2021-02-04T15:26:35Z
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [card_brand] => visa
    [card_number] => 490117...0003
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [threeds] => {:authentication_flow=>"fallback", :protocol=>{:target_version=>"2", :concrete_version=>"1"}}
)
```

```xml
<payment_response content=[
    <transaction_type content=[init_recurring_sale3d]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[test]>
    <timestamp content=[2021-02-04T15:26:35Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[490117...0003]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <threeds content=[{:authentication_flow=>"fallback", :protocol=>{:target_version=>"2", :concrete_version=>"1"}}]>
]>
```

```json
{
    transaction_type: "init_recurring_sale3d",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "119643250547501c79d8295",
    mode: "test",
    timestamp: "2021-02-04T15:26:35Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    card_brand: "visa",
    card_number: "490117...0003",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    threeds: "{:authentication_flow=>"fallback", :protocol=>{:target_version=>"2", :concrete_version=>"1"}}",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>init_recurring_sale3d</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <mode>test</mode>
  <timestamp>2021-02-04T15:26:35Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>490117...0003</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <threeds>
    <authentication_flow>fallback</authentication_flow>
    <protocol>
      <target_version>2</target_version>
      <concrete_version>1</concrete_version>
    </protocol>
  </threeds>
</payment_response>
```

Successful Reconcile Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant

Parameter	Type	Description
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
threeds		
authentication_flow	string(255)	Identifies the concrete authentication flow of the 3DS transaction that it has gone through. It will be included only if the transaction reaches the final state. The possible values for 3DSv1 are **payer_authentication**. The possible values for 3DSv2 are **frictionless**, **challenge**, **fallback**.
protocol		
target_version	integer	Identifies the requested version of the 3DS authentication protocol to be used. The possible values are **1**, **2**.
concrete_version	integer	Identifies the concrete version of the 3DS authentication protocol that the transaction has been processed through. The possible values are **1**, **2**.

NOTIFICATION

Once the transaction reaches final state, a notification will be sent to the `notification_url` submitted in the initial transaction request. For more information, go to Asynchronous Transactions and Notifications.

Notification Example for fallback flow

```
?transaction_id=119643250547501c79d8295
&unique_id=44177a21403427eb96664a6d7e5d5d48
&transaction_type=init_recurring_sale3d
&terminal_token=394f2ebc3646d3c017fa1e1cbc4a1e20
&status=approved
&amount=100
&signature=088e16a1019277b15d58faf0541e11910eb756f6
&eci=05
&avs_response_code=5I
&avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=fallback
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=1
```

3DS Attributes

Name	Type	Description
threeds_authentication_flow	string	Identifies the concrete 3DS authentication flow that the transaction has gone through. It will be available in the notification only if the consumer has finished the 3DS authentication with the issuer. The value for 3DSv1 will be payer_authentication. The available values for 3DSv2 are frictionless, challenge and fallback.
threeds_method_status	string	Identifies the status of the 3DS-Method in the scope of 3DSv2 authentication protocol. The possible values are **required**, **in_progress** and **completed**.
threeds_target_protocol_version	string(1)	Identifies the 3DS protocol that has been enforced. The possible values are **1**, **2**. In case it's **2**, you are integrated with the 3DSv2 authentication protocol, otherwise with 3DSv1.
threeds_concrete_protocol_version	string(1)	Identifies the concrete 3DS protocol version that the transaction has gone through. The possible values are **1**, **2**. The value will be **1** in case of 3DSv1 authentication protocol used or a fallback from 3DSv2 to 3DSv1 has happened

Please have in mind, the above 3DS related params will be available for all transactions supporting 3DS in async workflowAuthorize3d, Sale3d, or InitRecurringSale3d. For more information about the 3DS transactions, go to 3DS Card.

FALLBACK WITH 3DSECURE METHOD

A 3DSecure Fallback Flow is possible for circumstances where 3DSv2 is not available or the authentication response gained via 3DSv2 is not sufficient for obtaining a liability shift. Another possibility for the authentication to be downgraded to 3DSv1 could be a card not-enrolled in the 3DSv2 service, but a a record exists in the 3DSv1 system.

In order to enforce using the 3DSv2 authentication protocol, make sure to **include** the **threeds_v2_params** in the transaction request.

Asynchronous 3DS Method submission

A link between the customer's browser and the card issuer must be opened with a hidden iframe. It is used for the card issuer to load JavaScript which gathers device information to be returned to the card issuer. The next step after initiating the iframe, is to submit an API call to the `threeds_method_continue_url` using **HTTP PUT**, to retrieve the next step in the authentication. The API request won't require HTTP basic authentication, but a proper **signature** needs to be included to prove the authenticity of the request. The response of this API call will be the same as the normal 3D transaction processing API response, but with the only difference that an additional interaction with the issuer might be requested.

The asynchronous submission of the 3DS-Method might look difficult to achieve, but mitigates the risk of potential transaction processing interruptions, because the consumer redirection does not depend on a successful 3DS-Method submission. A continuation of the 3DS-Method might be requested regardless of the 3DS-Method submission result. It's a responsibility of the ACS then to take the appropriate decision how to continue with the authentication.

In order to simulate this authentication flow, use a test card4901164281364345 for fallback flow that requires 3DS-Method and submit a 3DSv2 transaction in asynchronous workflow by including the `threeds_v2_params`.

The response of the API will indicate that further action is required:

- `status` - **pending_async**
- `threeds_method_url` - the URL action where the 3DS-Method needs to be submitted using HTTP POST
- `threeds_method_continue_url` - API endpoint that accepts HTTP PUT requests with a signature and returns transaction API response identifying what the next step is *(transaction completed or consumer interaction is needed)*

In order to submit a 3DS-Method, you need to create a hidden iframe in the consumer browser (client side) with an `html` and `body` tags as described below, on the right side and create a hidden **HTML form** that:

- targets the iframe
- uses HTTP METHOD **POST** - `method="post"`
- has an **action** equivalent to the value of `threeds_method_url`, received from the response of the initial transaction request
- has 2 hidden inputs
  - `unique_id` - equivalent to the value of the `unique_id`, received from the response of the initial transaction request
  - `signature` - **SHA512** of a concatenated string (**unique_id**, **amount**, **timestamp**, **merchant_api_password**), where **unique_id**, **amount**, **timestamp** can be taken from the response of the initial transaction request and **merchant_api_password** is the password used for HTTP Basic authentication to the API during the initial transaction request
- submit the HTML form in the background using JavaScript

Once the 3DS-Method submission is initiated, a callback via HTTP POST will be done inside the iframe when the 3DS-Method reaches the final state. The 3DS-Method callback will be sent to the `callback_url` (submitted in the 3DSv2 request params as described in the diagram below) and will be constructed as described below:

- with request headers
  - `Content-Type` - **application/x-www-form-urlencoded**
- with POST request params
  - `unique_id` - the exact **unique_id** of the transaction in the initial transaction request
  - `threeds_method_status` - the status of the 3DS-Method submission, expect a value of **completed**
  - `signature` - **SHA512** of a concatenated string with the values of **unique_id**, **threeds_method_status**, and **merchant_api_password** where **unique_id** and **threeds_method_status** are POST params and **merchant_api_password** is the password used for HTTP HTTP Basic authentication to the API during the initial transaction request

The callback above can be handled *(optional)* in order to get informed of the 3DS-Method status, whether it has completed or not.

In case you have implemented the 3DS-Method callback handler (it's not required), make sure you validate the signature before storing the 3DS-Method status as described above.

Right after submitting the 3DS-Method *(without waiting for the 3DS-Method completion)*, submit a 3DS-Method continue API call to determine what the next step that is required *(as described in the diagram below)*:

- no further action - payment successful / failed
- consumer <--> Issuer interaction needed

In order to submit the 3DS-Method continue call, please make sure to follow the steps, as described below in the diagram:

Submit an API call using HTTP METHOD **PUT** to the URL returned in `threeds_method_continue_url` during the initial transaction request:

- with request headers
  - `Content-Type` - **application/x-www-form-urlencoded**
- with request params
  - `signature` - the same signature used for submitting the 3DS-Method

The response of the API call will be transaction response XML indicating what is expected:

- no action, the `status` will be in final state *(authentication completed without friction and authorization has been performed)*
- consumer redirection, the `status` will be **pending_async** *(consumer interaction with the the issuer needed to complete the authentication)*

Please, be aware that in case of improper **signature** submitted, the API will return HTTP status **400 Bad Request** and empty response.

Asynchronous 3 D Sv2 Fallback With 3 Ds Method Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale3D');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4901164281364345')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')


        // Threeds V2 Params
        ->setThreedsThreedsMethod('{"callback_url"="https://www.example.com/threeds/threeds_method/callback"}')
        ->setThreedsControl('{"device_type"="browser", "challenge_window_size"="full_screen", "challenge_indicator"="preference"}')
        ->setThreedsPurchase('{"category"="service"}')
        ->setThreedsRecurring('{"expiration_date"="05-08-2021", "frequency"=>30}')
        ->setThreedsMerchantRisk('{"shipping_indicator"="verified_address", "delivery_timeframe"="electronic", "reorder_items_indicator"="reordered", "pre_order_purchase_indicator"="merchandise_available",
        ->setThreedsCardHolderAccount('{"creation_date"="05-02-2020", "update_indicator"="more_than_60days", "last_change_date"="05-11-2020", "password_change_indicator"="no_change", "password_change_date"
        ->setThreedsBrowser('{"accept_header"="*/*", "java_enabled"="false", "language"="en-GB", "color_depth"="24", "screen_height"="900", "screen_width"="1440", "time_zone_offset"="-120", "user_agent"
        ->setThreedsSdk('{"interface"="native", "ui_types"={"ui_type"="multi_select"}, "application_id"="fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"="encrypted-data-here", "ephemeral_public_ke

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.Sale3DRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    Sale3DRequest request = new Sale3DRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4901164281364345");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));


    // Threeds V2 Params
    request.setThreedsThreedsMethod("{"callback_url"=>"https://www.example.com/threeds/threeds_method/callback"}");
    request.setThreedsControl("{"device_type"=>"browser", "challenge_window_size"=>"full_screen", "challenge_indicator"=>"preference"}");
    request.setThreedsPurchase("{"category"=>"service"}");
    request.setThreedsRecurring("{"expiration_date"=>"05-08-2021", "frequency"=>30}");
    request.setThreedsMerchantRisk("{"shipping_indicator"=>"verified_address", "delivery_timeframe"=>"electronic", "reorder_items_indicator"=>"reordered", "pre_order_purchase_indicator"=>"merchandise_available
    request.setThreedsCardHolderAccount("{"creation_date"=>"05-02-2020", "update_indicator"=>"more_than_60days", "last_change_date"=>"05-11-2020", "password_change_indicator"=>"no_change", "password_change_da
    request.setThreedsBrowser("{"accept_header"=>"*/*", "java_enabled"=>"false", "language"=>"en-GB", "color_depth"=>"24", "screen_height"=>"900", "screen_width"=>"1440", "time_zone_offset"=>"-120", "user_agen
    request.setThreedsSdk("{"interface"=>"native", "ui_types"=>{"ui_type"=>"multi_select"}, "application_id"=>"fc1650c0-5778-0138-8205-2cbc32a32d65", "encrypted_data"=>"encrypted-data-here", "ephemeral_public_

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale3d(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": 100,
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4901164281364345",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987"
```

```
    "customer_phone": "19879879879",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "threeds_v2_params": {
      "threeds_method": {
        "callback_url": "https://www.example.com/threeds/threeds_method/callback"
      },
      "control": {
        "device_type": "browser",
        "challenge_window_size": "full_screen",
        "challenge_indicator": "preference"
      },
      "purchase": {
        "category": "service"
      },
      "recurring": {
        "expiration_date": "05-08-2021",
        "frequency": 30
      },
      "merchant_risk": {
        "shipping_indicator": "verified_address",
        "delivery_timeframe": "electronic",
        "reorder_items_indicator": "reordered",
        "pre_order_purchase_indicator": "merchandise_available",
        "pre_order_date": "05-03-2021",
        "gift_card": "true",
        "gift_card_count": "2"
      },
      "card_holder_account": {
        "creation_date": "05-02-2020",
        "update_indicator": "more_than_60days",
        "last_change_date": "05-11-2020",
        "password_change_indicator": "no_change",
        "password_change_date": "21-01-2021",
        "shipping_address_usage_indicator": "current_transaction",
        "shipping_address_date_first_used": "31-01-2021",
        "transactions_activity_last_24_hours": "2",
        "transactions_activity_previous_year": "10",
        "provision_attempts_last_24_hours": "1",
        "purchases_count_last_6_months": "5",
        "suspicious_activity_indicator": "no_suspicious_observed",
        "registration_indicator": "30_to_60_days",
        "registration_date": "05-02-2019"
      },
      "browser": {
        "accept_header": "*/*",
        "java_enabled": "false",
        "language": "en-GB",
        "color_depth": "24",
        "screen_height": "900",
        "screen_width": "1440",
        "time_zone_offset": "-120",
        "user_agent": "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36"
      },
      "sdk": {
        "interface": "native",
        "ui_types": {
          "ui_type": "multi_select"
        },
        "application_id": "fc1650c0-5778-0138-8205-2cbc32a32d65",
        "encrypted_data": "encrypted-data-here",
        "ephemeral_public_key_pair": "public-key-pair",
        "max_timeout": "10",
        "reference_number": "sdk-reference-number-here"
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <usage>40208 concert tickets</usage>
  <remote_ip>245.253.2.12</remote_ip>
  <amount>100</amount>
  <currency>USD</currency>
  <card_holder>Travis Pastrana</card_holder>
  <card_number>4901164281364345</card_number>
  <expiration_month>12</expiration_month>
  <expiration_year>2022</expiration_year>
  <cvv>834</cvv>
  <customer_email>travis@example.com</customer_email>
  <customer_phone>+1987987987987</customer_phone>
  <billing_address>
    <first_name>Travis</first_name>
    <last_name>Pastrana</last_name>
    <address1>Muster Str. 12</address1>
    <zip_code>10178</zip_code>
    <city>Los Angeles</city>
    <state>CA</state>
    <country>US</country>
  </billing_address>
  <notification_url>https://www.example.com/notification</notification_url>
  <return_success_url>http://www.example.com/success</return_success_url>
  <return_failure_url>http://www.example.com/failure</return_failure_url>
  <threeds_v2_params>
    <threeds_method>
      <callback_url>https://www.example.com/threeds/threeds_method/callback</callback_url>
    </threeds_method>
    <control>
      <device_type>browser</device_type>
      <challenge_window_size>full_screen</challenge_window_size>
      <challenge_indicator>preference</challenge_indicator>
    </control>
    <purchase>
      <category>service</category>
    </purchase>
    <merchant_risk>
      <shipping_indicator>verified_address</shipping_indicator>
      <delivery_timeframe>electronic</delivery_timeframe>
      <reorder_items_indicator>reordered</reorder_items_indicator>
      <pre_order_purchase_indicator>merchandise_available</pre_order_purchase_indicator>
      <pre_order_date>05-03-2021</pre_order_date>
      <gift_card>true</gift_card>
      <gift_card_count>2</gift_card_count>
    </merchant_risk>
    <card_holder_account>
      <creation_date>05-02-2020</creation_date>
      <update_indicator>more_than_60days</update_indicator>
      <last_change_date>05-11-2020</last_change_date>
      <password_change_indicator>no_change</password_change_indicator>
      <password_change_date>21-01-2021</password_change_date>
      <shipping_address_usage_indicator>current_transaction</shipping_address_usage_indicator>
      <shipping_address_date_first_used>31-01-2021</shipping_address_date_first_used>
      <transactions_activity_last_24_hours>2</transactions_activity_last_24_hours>
      <transactions_activity_previous_year>10</transactions_activity_previous_year>
      <provision_attempts_last_24_hours>1</provision_attempts_last_24_hours>
      <purchases_count_last_6_months>5</purchases_count_last_6_months>
      <suspicious_activity_indicator>no_suspicious_observed</suspicious_activity_indicator>
      <registration_indicator>30_to_60_days</registration_indicator>
      <registration_date>05-02-2019</registration_date>
    </card_holder_account>
    <browser>
      <accept_header>*/*</accept_header>
      <java_enabled>false</java_enabled>
      <language>en-GB</language>
      <color_depth>24</color_depth>
      <screen_height>900</screen_height>
      <screen_width>1440</screen_width>
      <time_zone_offset>-120</time_zone_offset>
      <user_agent>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36</user_agent>
    </browser>
    <sdk>
      <interface>native</interface>
      <ui_types>
        <ui_type>multi_select</ui_type>
      </ui_types>
      <application_id>fc1650c0-5778-0138-8205-2cbc32a32d65</application_id>
      <encrypted_data>encrypted-data-here</encrypted_data>
      <ephemeral_public_key_pair>public-key-pair</ephemeral_public_key_pair>
      <max_timeout>10</max_timeout>
      <reference_number>sdk-reference-number-here</reference_number>
    </sdk>
  </threeds_v2_params>
</payment_transaction>'
```

Fallback With 3 Ds Method Response

```
stdClass Object
(
    [transaction_type] => sale3d
    [status] => pending_async
    [mode] => test
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [threeds_method_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method
    [threeds_method_continue_url] => https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:35.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[pending_async]>
    <mode content=[test]>
    <transaction_id content=[119643250547501c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <threeds_method_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method]>
    <threeds_method_continue_url content=[https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48]>
    <timestamp content=[2021-02-04T15:26:35Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "sale3d",
    status: "pending_async",
    mode: "test",
    transaction_id: "119643250547501c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    threeds_method_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method",
    threeds_method_continue_url: "https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48",
    timestamp: "2021-02-04T15:26:35Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <status>pending_async</status>
  <mode>test</mode>
  <transaction_id>119643250547501c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <threeds_method_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method</threeds_method_url>
  <threeds_method_continue_url>https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48</threeds_method_continue_url>
  <timestamp>2021-02-04T15:26:35Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

```
<!-- Sample HTML for the 3DS-Method submission in an iframe -->
<html>
    <head>
    </head>

    <body onload="submitThreedsMethod()">
        <iframe width="..." height="..." id="threeDSMethodIframe" name="threeDSMethodIframe">
            <html>
              <body>
              </body>
            </html>
        </iframe>

        <form id ="threeDSMethodForm" name="threeDSMethodForm"
              enctype="application/x-www-form-urlencoded;charset=UTF-8"
              style="display: none"
              method="post"
              action="https://staging.gate.e-comprocessing.net/threeds/threeds_method"
              target="threeDSMethodIframe">
            <input type="hidden" name="unique_id" value="44177a21403427eb96664a6d7e5d5d48" />
            <!-- The signature is built as per the above notes for merchant with API password f45ac65837d50dc26036a753e24dea9cd7d685e7 -->
            <input type="hidden" name="signature" value="b49f21956deed43f295a09c394d8d2e405acbf0ce99c6cdb03becf1de3a0230fc0918e120fd4da6ceaecd66f2add9341ca4cc5de221aaf3afa246484e984911e" />
        </form>
    </body>

    <script>

        function submitThreedsMethod() {
            threeDSMethodForm = document.getElementById('threeDSMethodForm');
            threeDSMethodForm.submit();
        }

    </script>

</html>
```

```
<!-- 3DS-Method Callback inside the iframe indicating the 3DS-Method completed -->
<!-- Content-Type: application/x-www-form-urlencoded -->
<!-- The signature is built as per the above notes for merchant with API password f45ac65837d50dc26036a753e24dea9cd7d685e7 -->

POST https://www.example.com/threeds/threeds_method/callback

unique_id=44177a21403427eb96664a6d7e5d5d48
&threeds_method_status=completed
&signature=c03a20929dcdd47c69c10b30b583425fd8a6122f5b369764a64dddb136d8ec556b16ef63d0a10541aa1ef64356ef99647d195f2f1ecc9e068033838efeb1b9de
```

```
<!-- 3DS-Method continue API call -->
<!-- Content-Type: application/x-www-form-urlencoded -->
<!-- The signature is built as per the above notes for merchant with API password f45ac65837d50dc26036a753e24dea9cd7d685e7 -->

curl https://staging.gate.e-comprocessing.net/threeds/threeds_method/44177a21403427eb96664a6d7e5d5d48 \
   -X PUT \
   -H "Content-Type: application/x-www-form-urlencoded" \
   -d signature=b49f21956deed43f295a09c394d8d2e405acbf0ce99c6cdb03becf1de3a0230fc0918e120fd4da6ceaecd66f2add9341ca4cc5de221aaf3afa246484e984911e
```

3 Ds Method Continue Response

```
stdClass Object
(
    [transaction_type] => sale3d
    [status] => pending_async
    [mode] => test
    [transaction_id] => 119643250547501c79d8295
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [redirect_url] => https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48
    [redirect_url_type] => 3ds_v1_payer_authentication
    [timestamp] => DateTime Object
        (
            [date] => 2021-02-04 15:26:35.000000
            [timezone_type] => 2
            [timezone] => Z
        )
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [sent_to_acquirer] => false
)
```

```
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[pending_async]>
    <mode content=[test]>
    <transaction_id content=[1196432505475 01c79d8295]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url content=[https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48]>
    <redirect_url_type content=[3ds_v1_payer_authentication]>
    <timestamp content=[2021-02-04T15:26:35Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <sent_to_acquirer content=[false]>
]>
```

```
{
    transaction_type: "sale3d",
    status: "pending_async",
    mode: "test",
    transaction_id: "1196432505475 01c79d8295",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    redirect_url: "https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48",
    redirect_url_type: "3ds_v1_payer_authentication",
    timestamp: "2021-02-04T15:26:35Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    sent_to_acquirer: "false",
}
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <transaction_type>sale3d</transaction_type>
  <status>pending_async</status>
  <mode>test</mode>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <redirect_url>https://staging.gate.e-comprocessing.net/threeds/authentication/44177a21403427eb96664a6d7e5d5d48</redirect_url>
  <redirect_url_type>3ds_v1_payer_authentication</redirect_url_type>
  <timestamp>2021-02-04T15:26:35Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <sent_to_acquirer>false</sent_to_acquirer>
</payment_transaction>
```

The consumer needs to be redirected to the Fallback `redirect_url` URL to complete the payer authentication with the ACS. Once the consumer completes the MFA *(Multi-Factor authentication)*, will be redirected either to `return_success_url` or `return_failure_url` depending on the payer authentication status and authorization response as described in the diagram below.

DIAGRAM

Acquire
Enrollment status
3DS Server
Enrollment status
provided
Enrolled?
NO
YES
Authorization
allowed?
NO
YES
Merchant
<payment_response>
...
<status>error | declined</status>
...
</payment_response>
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
Process
Transaction
Gateway
Transaction
successful?
NO
YES
Merchant
<payment_response>
...
<status>declined</status>
...
</payment_response>
Merchant
<payment_response>
...
<status>approved</status>
...
</payment_response>
Merchant
Enqueue
an asynchronous notification
about the payment
to notification_url
(HTTP POST)
3DS-Method
required
Gateway
Merchant
<payment_response>
...
<status>pending_async</status>
<unique_id>...</unique_id>
<threeds_method_url> 3ds_method_url</...>
<threeds_method_continue_url>api_call_continue_url</...>
...
</payment_response>
1
1st action:
3DS-Method
submission

2
2nd action
Continue
after
3DS-Method
submission
is initiated
Build an iframe and submit the 3DS-Method inside a form
by targeting the iframe and using HTTP POST
(invisible to the consumer)
<iframe width="xxx" height="xxx" style="..."
id="threeDSMethodIframe" name="threeDSMethodIframe">
<html>
<body></body>
</html>
</iframe>
...
<form name="threeDSMethodForm" id ="threeDSMethodForm" method="post"
enctype="application/x-www-form-urlencoded;charset=UTF-8"
style="display: none"
action="{threeds_method_url}"
target="threeDSMethodIframe">
<input type="hidden" name="unique_id" value="{unique_id}" />
<input type="hidden" name="signature" value="SHA512(...)" />
</form>
...
<script>
function submitThreedsMethod() {
document.getElementById('threeDSMethodForm').submit();
}
</script>
Initiate
3DS-Method
(submitThreedsMethod)
Gateway
Signature valid?
NO
400
Bad Request
(no response body)
Merchant
YES
3DS-Method required?
NO
400
Bad Request
(no response body)
Merchant
YES
Gateway
Acquire
3DS-Method Content
(HTTP POST)
Access Control Server (ACS)

3DS-Method content
(HTML + JS)
provided
Gateway
Render
3DS-Method content
(HTML + JS)
Merchant
(iframe)
Automatic
3DS-Method form submission
(HTTP POST)
Access Control
Server (ACS)
Callback
(HTTP POST)
3DS Server
Callback
(HTTP POST)
Gateway
Transition
3DS-Method status
to Completed
Gateway
callback_url
submitted?
NO
200 OK
(no response body)
Merchant
(iframe)
No further action needed
(3DS-Method completed)
YES
Callback
(HTTP POST)
Merchant
(iframe)
POST {threeds_method_callback_url}?
unique_id={unique-id-
here}&threeds_method_status=completed
&signature={SHA512(...)}
Validate
Signature
Merchant
(iframe)

Handle 3DS-Method status
AUTOMATED 3DS-METHOD SUBMISSION (IFRAME)
Merchant
API call (HTTP PUT)
PUT {threeds_method_continue_url}?signature={SHA512(...)}
Gateway
Merchant
400 Bad Request
(no response body)
NO
Signature valid?
YES
Acquire MPI params
3DS Server
Payer Authentication (fallback to 3DSv1) required
Merchant
<payment_response>
...
<status>pending_async</status>
<redirect_url>3ds_v1_payer_authetiocation_url</...>
<redirect_url_type>3ds_v1_payer_authentication</...>
...
</payment_response>
Gateway
Handle response
Merchant
Redirect consumer to redirect_url (HTTP GET)
Gateway
Acquire Payer authentication Form (HTTP POST)
Access Control Server (ACS)
Authentication Form provided
Consumer
Render Authentication form
Gateway
Complete the 2FA
PAYER AUTHENTICATION (FALLBACK TO 3DSv1)
Consumer
Submit Authentication form (HTTP POST)
Access Control Server (ACS)

Verify Authentication
Access Control Server (ACS)
Callback (HTTP POST)
Gateway
Acquire MPI params
3DS Server
MPI Params provided
Gateway
Store MPI params
Authenticated?
NO
Redirect consumer to return_failure_url (HTTP GET)
Consumer
Back to merchant
Merchant
YES
Process Transaction
Enqueue an asynchronous notification about the payment to notification_url (HTTP POST)
Merchant
Gateway
Transaction successful?
NO
Redirect consumer to return_failure_url (HTTP GET)
Consumer
Back to merchant
Merchant
YES
Redirect consumer to return_success_url (HTTP GET)
Consumer
Back to merchant
Merchant

RECONCILE

Once the transaction reaches the final state, a single reconcile can also be performed to retrieve more detailed information about the 3D transaction. It should include information about the 3DS transaction as described in the reconcile request/response below, on the right.

Reconcile 3 D Transaction By Unique Id Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('NonFinancial\Reconcile\Transaction');
    $request = $genesis->request();

    $request
        ->setUniqueId('44177a21403427eb96664a6d7e5d5d48');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.nonfinancial.reconcile.ReconcileRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    ReconcileRequest request = new ReconcileRequest();

    request.setUniqueId("44177a21403427eb96664a6d7e5d5d48");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.reconcile(
  {
    "unique_id": "44177a21403427eb96664a6d7e5d5d48"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/reconcile/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <reconcile>
    <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  </reconcile>'
```

Successful Reconciliation Of 3 D Sv2 Transaction With Fallback To 3 D Sv1 And 3 Ds Method Response

```
stdClass Object
(
    [transaction_type] => sale3d
    [status] => approved
    [authorization_code] => 005645
    [retrieval_reference_number] => 016813015184
    [response_code] => 00
    [unique_id] => 44177a21403427eb96664a6d7e5d5d48
    [transaction_id] => 119643250547501c79d8295
    [mode] => test
    [timestamp] => 2021-02-04T15:26:36Z
    [descriptor] => Descriptor one
    [amount] => 100
    [currency] => USD
    [card_brand] => visa
    [card_number] => 490116...4345
    [card_type] => CREDIT
    [card_subtype] => CARD SUBTYPE
    [card_issuing_bank] => Issuing Bank
    [bank_account_number] => Bank Account Number
    [bank_identifier_code] => Bank Identifier Code
    [sent_to_acquirer] => true
    [arn] => 74537605259536043849425
    [threeds] => {:authentication_flow=>"fallback", :threeds_method=>{:status=>"completed"}, :protocol=>{:target_version=>"2", :concrete_version=>"1"}}
)
```

```
<payment_response content=[
    <transaction_type content=[sale3d]>
    <status content=[approved]>
    <authorization_code content=[005645]>
    <retrieval_reference_number content=[016813015184]>
    <response_code content=[00]>
    <unique_id content=[44177a21403427eb96664a6d7e5d5d48]>
    <transaction_id content=[119643250547501c79d8295]>
    <mode content=[test]>
    <timestamp content=[2021-02-04T15:26:36Z]>
    <descriptor content=[Descriptor one]>
    <amount content=[100]>
    <currency content=[USD]>
    <card_brand content=[visa]>
    <card_number content=[490116...4345]>
    <card_type content=[CREDIT]>
    <card_subtype content=[CARD SUBTYPE]>
    <card_issuing_bank content=[Issuing Bank]>
    <bank_account_number content=[Bank Account Number]>
    <bank_identifier_code content=[Bank Identifier Code]>
    <sent_to_acquirer content=[true]>
    <arn content=[74537605259536043849425]>
    <threeds content=[{:authentication_flow=>"fallback", :threeds_method=>{:status=>"completed"}, :protocol=>{:target_version=>"2", :concrete_version=>"1"}}]>
]>
```

```
{
    transaction_type: "sale3d",
    status: "approved",
    authorization_code: "005645",
    retrieval_reference_number: "016813015184",
    response_code: "00",
    unique_id: "44177a21403427eb96664a6d7e5d5d48",
    transaction_id: "119643250547501c79d8295",
    mode: "test",
    timestamp: "2021-02-04T15:26:36Z",
    descriptor: "Descriptor one",
    amount: "100",
    currency: "USD",
    card_brand: "visa",
    card_number: "490116...4345",
    card_type: "CREDIT",
    card_subtype: "CARD SUBTYPE",
    card_issuing_bank: "Issuing Bank",
    bank_account_number: "Bank Account Number",
    bank_identifier_code: "Bank Identifier Code",
    sent_to_acquirer: "true",
    arn: "74537605259536043849425",
    threeds: "{:authentication_flow=>"fallback", :threeds_method=>{:status=>"completed"}, :protocol=>{:target_version=>"2", :concrete_version=>"1"}}",
}
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<payment_response>
  <transaction_type>sale3d</transaction_type>
  <status>approved</status>
  <authorization_code>005645</authorization_code>
  <retrieval_reference_number>016813015184</retrieval_reference_number>
  <response_code>00</response_code>
  <unique_id>44177a21403427eb96664a6d7e5d5d48</unique_id>
  <transaction_id>1196432505475 01c79d8295</transaction_id>
  <mode>test</mode>
  <timestamp>2021-02-04T15:26:36Z</timestamp>
  <descriptor>Descriptor one</descriptor>
  <amount>100</amount>
  <currency>USD</currency>
  <card_brand>visa</card_brand>
  <card_number>490116...4345</card_number>
  <card_type>CREDIT</card_type>
  <card_subtype>CARD SUBTYPE</card_subtype>
  <card_issuing_bank>Issuing Bank</card_issuing_bank>
  <bank_account_number>Bank Account Number</bank_account_number>
  <bank_identifier_code>Bank Identifier Code</bank_identifier_code>
  <sent_to_acquirer>true</sent_to_acquirer>
  <arn>74537605259536043849425</arn>
  <threeds>
    <authentication_flow>fallback</authentication_flow>
    <threeds_method>
      <status>completed</status>
    </threeds_method>
    <protocol>
      <target_version>2</target_version>
      <concrete_version>1</concrete_version>
    </protocol>
  </threeds>
</payment_response>
```


Successful Reconcile Response Parameters

Parameter	Type	Description
transaction_type	string(255)	The transaction type
status	string(255)	Status of the transaction, see states
transaction_id	string(255)	Unique transaction id defined by merchant
unique_id	string(32)	Unique id defined by gate (must later be used if capturing, voiding or refunding a transaction)
moto	'true'	Signifies whether a MOTO (mail order telephone order) transaction is performed. Contact tech support for more details.
avs_response_code	string(255)	Generated by the card network on trying to match the billing address when performing the address verification. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
avs_response_text	string(255)	Gives the human response text for the AVS response code above. Optional, returned if config is enabled and acquirer supports it. Check AVS Status Codes for details.
cvv_result_code	string(1)	Card Verification Value response code. Optional, returned only if acquirer supports it
authorization_code	string(6)	Generated by the card network when an authorisation has occurred, used to identify that auth. Consists of 6 alphanumeric chars
retrieval_reference_number	string(255)	A reference number used for tracking all messages related to a given cardholder transaction returned by some acquirers.
response_code	string(2)	Defines the issuer result of a transaction, the status of a message or some action taken or required. See issuer response codes for details
mode	string(4)	Mode of the transaction's terminal, can be **test** or **live**
timestamp	string(255)	Time when the transaction was processed in ISO 8601 Combined date and time e.g. 2007-08- 30T17:46:11Z
descriptor	string(255)	Static descriptor MID info as configured on the gateway
amount	integer	Amount of transaction in minor currency unit, see Currency and Amount Handling for details
currency	string(255)	Currency code in ISO 4217
partial_approval	string(4)	Optional, set to 'true' if partial approval happened. Partially approved amount is then in the amount field. Check Partial Approvals for details
sent_to_acquirer	string(255)	"true" or "false"
threeds		
authentication_flow	string(255)	Identifies the concrete authentication flow of the 3DS transaction that it has gone through. It will be included only if the transaction reaches the final state. The possible values for 3DSv1 are **payer_authentication**. The possible values for 3DSv2 are **frictionless**, **challenge**, **fallback**.
threeds_method		
status	string(255)	Identifies the current status of 3DSv2-Method. The possible values are **required**, **in_progress**, **completed**.
protocol		
target_version	integer	Identifies the requested version of the 3DS authentication protocol to be used. The possible values are **1**, **2**.

Parameter	Type	Description
concrete_version	integer	Identifies the concrete version of the 3DS authentication protocol that the transaction has been processed through. The possible values are **1**, **2**.

NOTIFICATION

Once the transaction reaches final state, a notification will be sent to the `notification_url` submitted in the initial transaction request. For more information, go to Asynchronous Transactions and Notifications.

Notification Example for fallback flow with 3DS-Method

```
?transaction_id=119643250547501c79d8295
&unique_id=44177a21403427eb96664a6d7e5d5d48
&transaction_type=sale3d
&terminal_token=394f2ebc3646d3c017fa1e1cbc4a1e20
&status=approved
&amount=100
&signature=088e16a1019277b15d58faf0541e11910eb756f6
&eci=05
&avs_response_code=5I
&avs_response_text=Response+provided+by+issuer+processor%3B+Address+information+not+verified
&cvv_result_code=M
&authorization_code=005645
&retrieval_reference_number=016813015184
&threeds_authentication_flow=fallback
&threeds_method_status=completed
&threeds_target_protocol_version=2
&threeds_concrete_protocol_version=1
```

3DS Attributes

Name	Type	Description
threeds_authentication_flow	string	Identifies the concrete 3DS authentication flow that the transaction has gone through. It will be available in the notification only if the consumer has finished the 3DS authentication with the issuer. The value for 3DSv1 will be payer_authentication. The available values for 3DSv2 are frictionless, challenge and fallback.
threeds_method_status	string	Identifies the status of the 3DS-Method in the scope of 3DSv2 authentication protocol. The possible values are **required**, **in_progress** and **completed**.
threeds_target_protocol_version	string(1)	Identifies the 3DS protocol that has been enforced. The possible values are **1**, **2**. In case it's **2**, you are integrated with the 3DSv2 authentication protocol, otherwise with 3DSv1.
threeds_concrete_protocol_version	string(1)	Identifies the concrete 3DS protocol version that the transaction has gone through. The possible values are **1**, **2**. The value will be **1** in case of 3DSv1 authentication protocol used or a fallback from 3DSv2 to 3DSv1 has happened

Please have in mind, the above 3DS related params will be available for all transactions supporting 3DS in async workflow Authorize3d, Sale3d, or InitRecurringSale3d. For more information about the 3DS transactions, go to 3DS Card.

TESTING

Scenario	3DSecure Method	3DSecure Challenge	Fallback to 3DSv1	Result	Card Number	Note
Frictionless	-	-	-	Authenticated	4012000000060085	
Frictionless	Y	-	-	Authenticated	4066330000000004	
Low risk exemption accepted	-	-	-	Authenticated	5169750000001111	Used only for synchronous 3DS workflow.
Frictionless	-	-	-	Not authenticated	4111110000000922	
Frictionless	Y	-	-	Not authenticated	4111112232423922	
Challenge	-	Y	-	Choose Challenge result	4918190000000002	
Challenge	Y	Y	-	Choose Challenge result	4938730000000001	
Fallback to 3DSv1	-	-	Y	Choose PaRes response	4901170000000003	
Fallback to 3DSv1	Y	-	Y	Choose PaRes response	4901164281364345	

Authentication Services

Introduction

Authentication Services provide Strong Customer Authentication (SCA) which is a type of authentication relying on two or more independent elements.

SCA as defined by the European Central Bank (ECB) and in the context of the EU's Payment Services Directive (PSD2) is:

"a procedure based on the use of two or more of the following elements categorised as knowledge, ownership and inherence:

- something only the user knows, e.g. static password, code, personal identification number;
- something only the user possesses, e.g.token, smart card, mobile phone;
- something the user is, e.g. biometric characteristic, such as a fingerprint.

In addition, the elements selected must be mutually independent, i.e. the breach of one does not compromise the other(s).

At least one of the elements should be non-reusable and non-replicable (except for inherence), and not capable of being surreptitiously stolen via the Internet.

The strong authentication procedure should be designed in such a way as to protect the confidentiality of the authentication data."

Using multiple solutions from the same category would not constitute SCA.

SCA WITH 3DSECURE

Only the newest variant of 3DSecure involving one-time passwords (OTP) constitutes a form of SCA.

3DSecure however might be a weak SCA solution for several reasons:

1. it relies on the cards being actively enrolled by the cardholder after issuing, i.e prior any transaction made with it and
2. it is not available on all card schemes.

ALTERNATIVE SERVICES

A number of services exist that provide SCA in a compliant way.

They rely on different solutions like generating payment "secrets", one-time passwords etc. Key advantage of such services is that they allow cards to be enrolled "on-the-fly", i.e. during a transaction rather than having to be pre-enrolled after issuing.

Such services could potentially work with any card and are thus card scheme agnostic.

> Authentication services are not available by default, they need to be enabled on your account. Please contact Tech Support for further assistance.

Genesis KYC Services

General Info

Genesis KYC Services gives us the ability to perform particular checks on the integrity of the consumer data. Based on the returned consumer score we can decide whether we want to reject/approve a given transaction or perform another action for this consumer.

> You must contact support in order to obtain KYC service credentials.

Create Consumer Registration

Review all aspects of the customer's information, as it is received in the registration process, against local and external databases to increase accuracy and produce a risk score for that customer.

`POST /kyc_service/create_consumer`

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/create_consumer \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "customer_information": {
     "first_name": "John",
     "last_name": "Doe",
     "customer_email": "jdoe@example.com",
     "address1": "Sample Address",
     "address2": "4th floor",
     "city": "MyCity",
     "zip_code": "32132",
     "country": "BG",
     "province": "ProvinceName",
     "phone1": "0883113332",
     "phone2": "0883113334",
     "birth_date": "1987-03-03",
     "document_number": "f2345838972",
     "document_type": 3,
     "gender": "M"
   },
   "customer_unique_id": "21343253",
   "customer_registration_date": "2016-12-12",
   "customer_registration_ip_address": "255.255.255.255",
   "customer_username": "dimo16",
   "customer_registration_device_id": "12343242",
   "third_party_device_id": "3432424",
   "profile_action_type": 1,
   "device_fingerprint_type": 1,
   "current_profile_status": 1,
   "bonus_code": "1922",
   "bonus_amount": 100,
   "merchant_website": "dai.com",
   "how_did_you_hear": "friend",
   "affiliate_id": "1922"
 }'
```

Request Parameters

Parameter	Required	Format	Description
session_id	optional	string	If this value is not provided the user email account should be complete and valid
customer_information	required	object	Customer information. See below for each of the nested required fields
customer_username	optional	string	Username of the customer on your system
customer_unique_id	required	string	Unique user identificator on your system
customer_registration_date	required	string	Date in which the customer was registered in the system OR the date in which the customer was created in the cashier Database yyyy-mm-dd
customer_registration_ip_address	required	string	IP address of customer used when the customer was registered in the system OR the current IP address
customer_registration_device_id	optional	string	Propietary DeviceId technology, refer to the DeviceId Instruction Manual (provided on request)
third_party_device_id	optional	string	Third Party DeviceId
device_fingerprint	optional	string	Open Source DeviceId technologies (Intepreted as a String)
device_fingerprint_type	optional	enum	1 - Custom; 2 - Open Source; 3 - Open Source 2;
profile_action_type	optional	enum	1 - Registration;2 - Profile Update;
profile_current_status	optional	enum	0 - Undefined;1 - Review;2 - Denied;3 - Approved;
bonus_code	optional	string	Open text variable. Represents the code entered by the customer
bonus_submission_date	optional	string	
bonus_amount	optional	number	
merchant_website	optional	string	
industry_type	optional	string	1 - Finance; 2 - Gambling; 3 - Crypto; 4 - Travel; 5 - Retail; 6 - Risk Vendor; 7 - Adult; 8 - Remittance/Transfer; 9 - Other;
how_did_you_hear	optional	string	
affiliate_id	optional	string	
rule_context	optional	number	Number assigned to a given rule context. Please contact to get the available contexts

`required* = conditionally required`

Customer Information Fields

The fields of the customer information object.

Request Parameters

Parameter	Required	Format	Description
first_name	required	string	Customer first name
middle_name	optional	string	
last_name	required	string	Customer last name
customer_email	required	string	Must contain valid e-mail of customer
address1	required	string	Primary address
address2	optional	string	Secondary address
city	required	string	City
province	required	string	
zip_code	required	string	ZIP code
country	required	string	two-letter iso codes
phone1	optional	number	
phone2	optional	number	
birth_date	optional	string	Required for Visa only when MCC is a Financial Services one (e.g. MCC 6012)
document_type	optional	enum	0 - SSN; 1 - Passport Registry; 2 - Personal ID / National ID; 3 - Identity Card; 4 - Driver License; 8 - Travel Document; 12 - Residence Permit; 13 - Identity Certificate; 16 - Registro Federal de Contribuyentes; 17 - Credencial de Elector; 18 - CPF
document_number	optional	string	
gender	optional	enum	F - female; M - male

`required* = conditionally required`


```
{
  "code": 0,
  "message": "Successful Response",
  "technical_message": "Successful Response",
  "details": [
    {
      "reference_id": "233",
      "risk_score": 98,
      "kyc_provider_recommendation": "Reject",
      "rules_triggered": [
        {
          "name": "Multi-Accounting : IP shared to Chargeback reason",
          "risk_score": "100.00",
          "display_to_merchant": 1
        }
      ],
      "scrubber_results": {
        "geo_check": "",
        "address_verification": "",
        "phone_verify": "",
        "idv_usa": "",
        "idv_global": "",
        "gav": "",
        "idv_br": "",
        "bav_usa": "",
        "bav_advanced": "",
        "cb_aml": "",
        "cb_bvs": "",
        "email_age": "",
        "compliance_watchlist": "",
        "iovation": "",
        "idv_advance": ""
      },
      "result_confidence_level": 91.5
    }
  ]
}
```


Successful Response Parameters

Parameter	Type	Description
code	number	genesis success code - 0
message	string	const 'Successful Response'
technical_message	string	const 'Successful Response'
details		
reference_id		
risk_score		

Parameter	Type	Description
kyc_provider_recommendation		
result_confidence_level		
...		

Update Consumer Registration

Update the customer registration to be able to pass on the latest status required so we can continue improving the data models and provide the best scores and recommendations possible.

`POST /kyc_service/update_consumer`

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/update_consumer \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
  "reference_id": "9999333344443",
  "profile_current_status": 2,
  "status_reason": "Reject"
 }'
```

Request Parameters

Parameter	Required	Format	Description
reference_id	required	number	Unique id returned by corresponding transaction
profile_current_status	required	enum	0 - Undefined; 1 - Review; 2 - Denied; 3 - Approved;
status_reason	optional	string	Required only if status is Reject / Decline / Chargeback / Refund / Return / Void

`required* = conditionally required`

Make sure that `reference_id` points to a preliminary created transaction (will describe transactions below).

```
 {
  "code": 0,
  "message": "Successful Response",
  "technical_message": "Successful Response",
  "details": [
    {
      "reference_id": "9999333344443"
    }
  ]
 }
```

Successful Response Parameters

Parameter	Type	Description
code	number	genesis success code - 0
message	string	const 'Successful Response'
technical_message	string	const 'Successful Response'
details		
reference_id		

Create Transaction

Implement this to scrub a new transaction. We will take the information specific to that transaction and run various verification checks available, returning the recommendation, score, and third-party verification scrubbing results.

`POST /kyc_service/create_transaction`

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/create_transaction \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "customer_information": {
     "first_name": "John",
     "last_name": "Doe",
     "customer_email": "jdoe@example.com",
     "address1": "Sample address",
     "city": "Paris",
     "zip_code": "666",
     "country": "FR",
     "province": "MyProvince"
   },
   "deposit_limits": {
     "payment_method": "CC"
   },
   "transaction_unique_id": "1332",
   "payment_details": {
     "bin": "411111",
     "tail": "1111"
   },
   "customer_ip_address": "255.255.255.255",
   "transaction_created_at": "2016-12-12 23:23:23",
   "currency": "USD",
   "amount": 99999
 }'
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/create_transaction \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "customer_information": {
     "first_name": "John",
     "last_name": "Doe",
     "customer_email": "jdoe@example.com",
     "address1": "Sample address",
     "city": "Paris",
     "zip_code": "666",
     "country": "FR",
     "province": "MyProvince"
   },
   "deposit_limits": {
     "payment_method": "EW"
   },
   "transaction_unique_id": "1332",
   "payment_details": {
     "ewallet_id": "test@example.com"
   },
   "customer_ip_address": "255.255.255.255",
   "transaction_created_at": "2016-12-12 23:23:23",
   "currency": "USD",
   "amount": 99999
 }'
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/create_transaction \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "customer_information": {
     "first_name": "John",
     "last_name": "Doe",
     "customer_email": "jdoe@example.com",
     "address1": "Sample address",
     "city": "Paris",
     "zip_code": "666",
     "country": "FR",
     "province": "MyProvince"
   },
   "deposit_limits": {
     "payment_method": "CC"
   },
   "transaction_unique_id": "1332",
   "payment_details": {
     "bin": "411111",
     "tail": "1111",
     "cvv_present": "YES"
   },
   "customer_ip_address": "255.255.255.255",
   "transaction_created_at": "2016-12-12 23:23:23",
   "currency": "USD",
   "amount": 99999
 }'
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/create_transaction \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "customer_information": {
     "first_name": "John",
     "last_name": "Doe",
     "customer_email": "jdoe@example.com",
     "address1": "Sample address",
     "city": "Paris",
     "zip_code": "666",
     "country": "FR",
     "province": "MyProvince"
   },
   "deposit_limits": {
     "payment_method": "EC"
   },
   "transaction_unique_id": "1332",
   "payment_details": {
     "routing": "1912",
     "account": "00000123451234512345000 00"
   },
   "customer_ip_address": "255.255.255.255",
   "transaction_created_at": "2016-12-12 23:23:23",
   "currency": "USD",
   "amount": 99999
 }'
```

Request Parameters

Parameter	Required	Format	Description
session_id	optional	string	If this value is not provided the user email account should be complete and valid
customer_username	optional	string	Username of the customer on your system
customer_unique_id	optional	string	Unique user identificator on your system
customer_status	optional	string	Current status of the customer account in your system
customer_loyalty_level	optional	string	Customer loyalty level; for example: VIP; Bronze; Platinum; Gold; etc. This is an open text variable
customer_registration_date	optional	string	Date in which the customer was registered in the system OR the date in which the customer was created in the cashier Database yyyy-mm-dd
customer_registration_ip_address	optional	string	IP address of customer used when the customer was registered in the system OR the current IP address
customer_registration_device_id	optional	string	Propietary DeviceId technology, refer to the DeviceId Instruction Manual (provided on request)
customer_information	required	object	Customer information. See below for each of the nested required fields
first_deposit_date	optional	string	Empty if first deposit yyyy-mm-dd
first_withdrawal_date	optional	string	Empty if 0 withdrawals yyyy-mm-dd
deposits_count	optional	number	
withdrawals_count	optional	number	
current_balance	optional	number	
deposit_limits	required	object	See below
transaction_unique_id	required	string	Transaction id
billing_information	optional	object	See below
shipping_information	optional	object	See below
payment_details	required	object	See below
amount	optional	number	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
currency	optional	string	ISO 4217 Three digits
transaction_created_at	required	string	Represents the time of the transaction on the Merchant server. Format: yyyy-mmdd hh:mm:ss
transaction_status	optional	enum	Transaction status; it is recommended to send 0 on the initial call. Afterwards call Update Transaction endpoint to update the status. 0 - numberUndefined; 1 - number- Approved; 2 - number- Pre-Auth; 3 - number- Settled; 4 - number- Void; 5 - number- Rejected internally by Negative Database or other scrubber decided to reject the transaction; 6 - number- Declined the bank / gateway / processor rejected the transaction; 7 - number- Chargeback; 8 - number- Return;9 - number- Pending; 10 - number- Pass Transaction validation;11 - number- Failed Transaction validation; 12 - number- efund; 13 - number- Approved Review; 14 - number- Abandon This status is used when the user just leaves the transaction;
customer_ip_address	required	string	Customers IP address
customer_device_id	optional	string	Propietary DeviceId technology; refer to the DeviceId Instruction Manual (provided on request)

Parameter	Required	Format	Description
third_party_device_id	optional	string	Third Party DeviceId
device_fingerprint	optional	string	Open Source DeviceId technologies (Intepreted as a String)
device_fingerprint_type	optional	enum	1 - Custom; 2 - Open Source; 3 - Open Source 2;
shopping_cart_items_count	optional	number	Represents the quantity of items in the shopping cart
local_time	optional	string	Represents the local time of the customer doing the transaction. Format: yyyy-mmdd hh:mm:ss
order_source	optional	enum	internet; mobile; inhouse
merchant_website	optional	string	Open text variable; it represents the website name or URL that submitted the transaction
industry_type	optional	enum	Definition of the industry type the transaction was performed on; 1-number - Finance; 2-number - Gambling; 3-number - Crypto; -number - Travel; 5-number - Retail; 6-number - Risk Vendor; 7-number - Adult; 8-number - Remittance/Transfer; 9-number - Other;
customer_password	optional	string	Open text variable; it represents the customers password in hashed format (using MD5) some companies share that information in order to look for patterns
rule_context	optional	number	Number assigned to a given rule context. Please contact to get the available contexts.
custom_variable	optional	string	Represents anything the merchant wants to store with this transaction

`required* = conditionally required`

Deposit Limits Fields

Request Parameters

Parameter	Required	Format	Description
payment_method	required	enum	CC; EC; EW - CreditCard; Echeck; EWallet
minimum	optional	number	Lowest valid amount for deposit in minor currency units; ex: 100 = $1
daily_maximum	optional	number	In minor currency units
weekly_maximum	optional	string	In minor currency units
monthly_maximum	optional	string	In minor currency units

`required* = conditionally required`

Billing Information Fields

Request Parameters

Parameter	Required	Format	Description
first_name	optional	string	Customer first name
last_name	optional	string	Customer last name
customer_email	optional	string	Must contain valid e-mail of customer
address1	optional	string	Primary address
address2	optional	string	Secondary address
city	optional	string	City
province	optional	string	
zip_code	optional	string	ZIP code
country	optional	string	ISO 3166-1 Alpha-2. For example: USD
phone1	optional	number	Numbers only; no dash or any other separator. Please include area code if applicable. Country code is not required
birth_date	optional	string	yyyy-mm-dd
gender	optional	enum	M; F

`required* = conditionally required`

Shipping Information Fields

Request Parameters

Parameter	Required	Format	Description
first_name	optional	string	Customer first name

Parameter	Required	Format	Description
last_name	optional	string	Customer last name
customer_email	optional	string	Must contain valid e-mail of customer
address1	optional	string	Primary address
address2	optional	string	Secondary address
city	optional	string	City
province	optional	string	
zip_code	optional	string	ZIP code
country	optional	string	ISO 3166-1 Alpha-2. For example: USD
phone1	optional	number	Numbers only; no dash or any other separator. Please include area code if applicable. Country code is not required

`required* = conditionally required`

Payment Details Fields

Request Parameters

Parameter	Required	Format	Description
bin	optional	string	First 6 digits of the card number; Only required if Payment Method Type is Credit Card;
tail	optional	string	Last 4 digits of the card number; Only required if Payment Method Type is Credit Card;
cvv_present	optional	string	Indicator if the CVV was received or not; The expected values in this field are Yes or No;
hashed_pan	optional	string	Only required if Payment Method Type is Credit Card; It should be hashed using SHA256; the string to be hashed is Card Numberand the MD5 hash of the Expiration Date; For example; if the card number is 1111-2222-3333-4444 with expiration date 01/22; The have should be done on the string without spaces nor dash nor other special chars; The MD5 of the Expiration Date 0122 is f0f4b6598f2cee45644673998b4f44be; That said; the string to be hashed is 1111222233334444f0f4b6598f2cee45644673998b4f44be which generates the following result fecd244b7d647b0db391e35910e0d42aaf88f7633a4f4f4883b109abad1d6d7
routing	optional	string	Routing number; Only required if Payment Method Type is eCheck;
account	optional	string	Only numbers up to 30 digits; Only required if Payment Method Type is eCheck;
ewallet_id	optional	string	Most of the times its an email; Only required if Payment Method Type is eWallet;

`required* = conditionally required`

Required attributes, depending on the Payment Method:

- For payment method CC
  - bin
  - tail
- For payment method CC OPTIONAL
  - cvv_present
  - hashed_pan
- For payment method EC
  - routing
  - account
- For payment method EW
  - ewallet_id

```
{
  "code": 0,
  "message": "Successful Response",
  "technical_message": "Successful Response",
  "details": [
    {
      "reference_id": "481119",
      "kyc_provider_recommendation": "Approve",
      "risk_score": 0.39,
      "third_party": "",
      "processors": "",
      "reason": "",
      "result_confidence_level": 91.5,
      "rules_triggered": [
        {
          "name": "Address Verification : Global 25",
          "score": "0",
          "display_to_merchant": 1
        }
      ],
      "bin_information": {
        "bank_name": "BANCO NACIONAL DE COSTA RICA",
        "bank_location": "COSTA RICA",
        "card_type": "STANDARD",
        "card_level": "DEBIT",
        "iso_card_country": "CR",
        "card_brand_db": "MASTERCARD",
        "card_brand_script": "MASTERCARD"
      },
      "scrubber_results": {
        "geo_check": "",
        "address_verification": "",
        "phone_verify": "",
        "idv_usa": "",
        "idv_global": "",
        "gav": "",
        "idv_br": "",
        "bav_usa": "",
        "bav_advanced": "",
        "cb_aml": "",
        "cb_bvs": "",
        "email_age": "",
        "compliance_watchlist": "",
        "iovation": "",
        "idv_advance": ""
      }
    }
  ]
}
```


Successful Response Parameters

Parameter	Type	Description
code	number	genesis success code - 0
message	string	const 'Successful Response'
technical_message	string	const 'Successful Response'
details		
reference_id		
kyc_provider_recommendation		
risk_score		
result_confidence_level		
...		

Update Transaction

Utilize this method to update a particular transaction status so we can continue improving the data models and provide the best scores and recommendations.

`POST /kyc_service/update_transaction`

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/update_transaction \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "transaction_status": 1,
   "reference_id": "4454982",
   "reason": "a reason message",
   "transaction_unique_id": "1332",
   "cvv_check_result": "",
   "avs_check_result": "",
   "processor_identifier": ""
 }'
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/update_transaction \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "transaction_status": 2,
   "transaction_unique_id": "1332"
 }'
```

Request Parameters

Parameter	Required	Format	Description
session_id	optional	string	If this value is not provided the user email account should be complete and valid
transaction_unique_id	required	string	Transaction id
reference_id	optional	number	Required only if status is Reject / Decline / Chargeback / Refund / Return / Void
transaction_status	optional	enum (number)	1-Approved; 2-Pre-Auth; 3-Settled; 4-Void; 5-Rejected internally by Negative Database or other scrubber decided to reject thetransaction; 6-Declined the bank / gateway / processor rejected the transaction; 7-Chargeback; 8-Return; 9-Pending; 10-Pass Transaction validation; 11-Failed ransaction validation; 12-Refund; 13-Approved Review; 14-Abandon This status is used when the user just leaves the transaction;
reason	optional	string	Required only if status is Reject / Decline / Chargeback / Refund / Return / Void
cvv_check_result	optional	string	Response from processor regarding CVV check
avs_check_result	optional	string	Result from processor regarding AVS check
processor_identifier	optional	string	Unique identifier of the processor attempted

`required* = conditionally required`

```
 {
  "code": 0,
  "message": "Successful Response",
  "technical_message": "Successful Response",
  "details": [
    {
      "reference_id": "481119"
    }
  ]
 }
```

Successful Response Parameters

Parameter	Type	Description
code	number	genesis success code - 0
message	string	const 'Successful Response'
technical_message	string	const 'Successful Response'
details		
reference_id		

Identity Document Upload

Used to verify documents provided by the customer.

When called this action returns the following:

- An instant response with a reference id and additional keys by which the particular query could be addressed.
- Async responses with answers from the performed checks (OCR, manual, etc.). Usually, this responses arrive after 5-7 minutes. The notification url is agreed on environment basis. Create a new transaction for the particular user before making a call of this kind.

`POST /kyc_service/upload_document`

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/upload_document \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "transaction_unique_id": "1332",
   "doc": {
     "mime_type": "image/jpeg",
     "base64_content": "{base_64_endcoded_content}"
   }
 }'
```

Request Parameters

Parameter	Required	Format	Description
customer_username	optional	string	Username of the customer on your system
customer_unique_id	optional	string	Unique user identificator on your system
transaction_unique_id	required*	string	Unique Transaction Id with info of the customer to be verified. Please note; if Transaction Id and Customer Registration Id are rovided the system will use the Transaction Id. Please provide the Transaction Id or the Customer Registration Id; one of them must be provided
reference_id	required*	string	Unique Customer Registration Id with info of the customer to be verified
method	required	enum (number)	1 - Manual; 2 - OCR; 3 - Both;
doc	required	object	see below
doc2; doc3; doc4	optional	object	additional document images

`required* = conditionally required`

One of `transaction_unique_id` and `reference_id` fields is required.

Document Fields

Request Parameters

Parameter	Required	Format	Description
base64_content	required	string	
mime_type	required	string	

`required* = conditionally required`

```
 {
   "code": 0,
   "message": "Successful Response",
   "technical_message": "Successful Response",
   "details": [
     {
       "kyc_source": "OCR",
       "reference_id": "382"
     },
     {
       "kyc_source": "Semi-manual",
       "reference_id": "129"
     }
   ],
   "doc": "51f7e411cd1202e040b21655738beb89",
   "doc2": "b0139d3fb1785c1e57ac5a6b054692eb",
   "doc3": "e0059153192876ce8ab36d8cd8ab1bca"
 }
```

Successful Response Parameters

Parameter	Type	Description
code	number	genesis success code - 0
message	string	const 'Successful Response'
technical_message	string	const 'Successful Response'
details		
kyc_source		
reference_id		

Identity Document Download

Uploaded documents will be stored by legal provisions and they can be requested for review. Just post a JSON body with the identity document id of the given document and a response with the filename and the base64 encoded content of that file would be returned.

`POST /kyc_service/download_document`

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/download_document \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
  "identity_document_id": "676a053b16781e43db7e75dcb1444ef8"
 }'
```

Request Parameters

Parameter	Required	Format	Description
identity_document_id	required	string	document id

`required* = conditionally required`

```
 {
  "code": 0,
  "message": "Successful Response",
  "technical_message": "Successful Response",
  "details": [
    {
      "document": {
        "file_name": "430d595c22dbae26ef39ed91c3aabb49.jpg",
        "base64_content": "{base_64_endcoded_content}"
      }
    }
  ]
 }
```

Successful Response Parameters

Parameter	Type	Description
code	number	genesis success code - 0
message	string	const 'Successful Response'
technical_message	string	const 'Successful Response'
details		
file_name		
base64_content		

Make call

This method is used to make a call or send an SMS to a given phone number. This method is used to complement the verification process. The system will make a call and dictates the verification code to be typed in the website. The following is a transcript of the voice message the system will use when en-US is used as language:

> Hello, thank you for using our phone verification system. Your code is [CODE]. Once again, your code is [CODE]. Goodbye!

The following is an example of the SMS text the system will use when en-US is used as language:

> Your code is [CODE]. Thank you.

`POST /kyc_service/create_authentication`

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/create_authentication \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "customer_username": "896342",
   "customer_unique_id": "2",
   "transaction_unique_id": "387783428790324",
   "customer_phone_number": "372489879342",
   "service_language": "bg",
   "security_code": "3423",
   "service_type": 1
 }'
```

Request Parameters

Parameter	Required	Format	Description
customer_username	optional	string	Username of the customer on your system
customer_unique_id	optional	string	Unique user identificator on your system
transaction_unique_id	required	string	Transaction identification in the merchants system; If not provided the system won't be able to link with the transaction that is being verified
customer_phone_number	required	string	Phone number to call; It must be complete country code + phone number; No dashes; For example: 50622560000
service_language	required	string	a string value; See below
security_code	required	string	Numeric value - 4 digits only; It cannot start with 0; The boot is going to say this numeric value so the user can type it back on the website;
service_type	required	string	Numeric value to indicate if the system will send a text message or make a voice call; 1 for SMS; 2 for Voice call;

`required* = conditionally required`

Available languages for t_language

Language	Code
Arabic	a
Cantonese, Chinese/Hong Kong	zh-HK
Catalan	ca
Croatian	hr
Czech	cs
Danish	da
Dutch	nl
English, Australian	en-AU
English, UK	en-GB
English, US	en-US
Estonian	et
Filipino	fil
Finnish	fi
French	fr
French, Canadian	fr-CA
German	de
Greek	el
Hebrew	he
Hindi	hi
Hungarian	hu
Icelandic	is
Indonesian	id
Italian	it
Japanese	ja

Language	Code
Korean	ko
Latvian	lv
Lingala	ln
Lithuanian	lt
Mandarin	zh-CN
Norwegian	no
Polish	pl
Portuguese, Brazilian	pt-BR
Portuguese, European	pt
Romanian	ro
Russian	ru
Slovakian	sk
Spanish, European	es
Spanish, Latin American	es-419
Swedish	sv
Thai	th
Turkish	tr
Ukrainian	uk
Vietnamese	vi

```
{
  "code": 0,
  "message": "Successful Response",
  "technical_message": "Successful Response",
  "details": [
    {
      "reference_id": "233"
    }
  ]
}
```

Successful Response Parameters

Parameter	Type	Description
code	number	genesis success code - 0
message	string	const 'Successful Response'
technical_message	string	const 'Successful Response'
details		
reference_id		

Update call

This method is used to update the call status with the latest info received from the main system. It also updates the transaction associated with this verification call.

`POST /kyc_service/update_authentication`

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/update_authentication \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
  "reference_id": 1237834,
  "security_code_input": "4322",
  "verification_status": "4"
 }'
```

Request Parameters

Parameter	Required	Format	Description
reference_id	required	string	Unique value to identify the call in back office.
security_code_input	required	string	Transaction identification in the merchants system; If not provided the system won't be able to link with the transaction that is being verified
verification_status	required	string	The first two values are defined by the system when the call is created; the ones accepted in this call are the status 3; 4 and 5 only 1-In Progress; 2-Failed; 3-Verification Failed; 4-Verification Successful; 5-Abandon;

`required* = conditionally required`

```
{
  "code": 0,
  "message": "Successful Response",
  "technical_message": "Successful Response",
  "details": [
    {
      "reference_id": "233"
    }
  ]
}
```

Successful Response Parameters

Parameter	Type	Description
code	number	genesis success code - 0
message	string	const 'Successful Response'
technical_message	string	const 'Successful Response'
details		
reference_id		

Create Verification

The verification request will provide a link that will be used to redirect the customer. The customer will provide the required documents and will be verified against them. As a result, the user will be redirected back to merchant based on the provided redirect URL.

`POST /kyc_service/verification`

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/verification \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
  "email": "test@email.com",
  "country": "US",
  "language": "EN",
  "redirect_url": "https://merchant.com/from_kyc",
  "document_supported_types": [
    "id_card",
    "passport"
  ],
  "address_supported_types": [
    "id_card",
    "passport"
  ],
  "face_enabled": true,
  "backside_proof_required": true
 }'
```

Request Parameters

Parameter	Required	Format	Description
email	required	string	User's email
country	required	string	Country code in ISO 3166
language	optional	string	Supported Language Code. Check Supported Languages
redirect_url	required	string	URL where the customer is sent to after completing the verification process
document_supported_types	required	array	Supported types of document that can be verified, CheckSupported Document Types
address_supported_types	optional	string	Supported types of address that can be verified, CheckSupported Address Types
face_enabled	optional	boolean	Signifies whether a face verification should be performed.

Parameter	Required	Format	Description
backside_proof_required	optional	boolean	Signifies that both sides of the document are required to verify the identity

`required* = conditionally required`


```
{
  "code": 0,
  "message": "Successful Response",
  "technical_message": "Successful Response",
  "status": "pending",
  "verification_url": "https://app.shuftipro.com/process/kyc/code",
  "reference_id": "2021-01-27-14:55:22-abb6966a-a6d4-4a3a-a364-ea3347384a90"
}
```


Successful Response Parameters

Parameter	Type	Description
code	number	0 - for successful response or genesis error code, see below
message	string	code description, 'Successful Response' for code - 0
technical_message	string	'Successful Response', or technical error description
status	string	Status of verification, Check Available Statuses Types
verification_url	string	URL that should be used by end user to submit verification process
reference_id	string	Unique value to identify the performed verification

SUPPORTED DOCUMENT TYPES

Supported Types
passport
id_card
driving_license
credit_or_debit_card

SUPPORTED ADDRESS TYPES

Supported Types
id_card
passport
driving_license
utility_bill
bank_statement
rent_agreement
employer_letter
insurance_agreement
tax_bill
envelope
cpr_smart_card_reader_copy

AVAILABLE STATUSES

Status
pending
error
cancelled
timeout
error
accepted
declined

Status
changed
deleted
received

SUPPORTED LANGUAGES

Country Name	Language Code
Afrikaans	AF
Albanian	SQ
Amharic	AM
Arabic	AR
Armenian	HY
Azerbaijani	AZ
Basque	EU
Belarusian	BE
Bengali	BN
Bosnian	BS
Bulgarian	BG
Burmese	MY
Catalan	CA
Chichewa	NY
Chinese	ZH
Corsican	CO
Croatian	HR
Czech	CS
Danish	DA
Dutch	NL
English	EN
Esperanto	EO
Estonian	ET
Filipino	TL
Finnish	FI
French	FR
Frisian	FY
Galician	GL
Georgian	KA
German	DE
Greek (modern)	EL
Gujarati	GU
Haitian, Haitian Creole	HT
Hausa	HA
Hebrew (modern)	HE
Hindi	HI
Hungarian	HU
Indonesian	ID

Country Name	Language Code
Irish	GA
Igbo	IG
Icelandic	IS
Italian	IT
Japanese	JA
Javanese	JV
Kannada	KN
Kazakh	KK
Khmer	KM
Kirghiz, Kyrgyz	KY
Korean	KO
Kurdish	KU
Latin	LA
Luxembourgish, Letzeburgesch	LB
Lao	LO
Lithuanian	LT
Latvian	LV
Macedonian	MK
Malagasy	MG
Malay	MS
Malayalam	ML
Maltese	MT
Maori	MI
Marathi	MR
Mongolian	MN
Nepali	NE
Norwegian	NO
Punjabi	PA
Persian	FA
Polish	PL
Pashto	PS
Portuguese	PT
Romanian	RO
Russian	RU
Sindhi	SD
Samoan	SM
Serbian	SR
Scottish Gaelic	GD
Shona	SN
Sinhala	SI
Slovak	SK
Slovenian	SL
Somali	SO

Country Name	Language Code
Sesotho	ST
Spanish	ES
Sundanese	SU
Swahili	SW
Swedish	SV
Tamil	TA
Telugu	TE
Tajik	TG
Thai	TH
Turkish	TR
Ukrainian	UK
Urdu	UR
Uzbek	UZ
Vietnamese	VI
Welsh	CY
Xhosa	XH
Yiddish	YI
Yoruba	YO
Zulu	ZU

Verification Status

Verification status check request can be performed by reference_id. A status check may be needed if async notification has not arrived yet or when kyc notifications are not used in general.

`POST /kyc_service/verification/status`

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/kyc_service/verification/status \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
  "reference_id": "2021-01-27-14:55:22-abb6966a-a6d4-4a3a-a364-ea3347384a90"
 }'
```

Request Parameters

Parameter	Required	Format	Description
reference_id	required	string	Unique value to identify the performed verification

`required* = conditionally required`

```
 {
  "code": 0,
  "message": "Successful Response",
  "technical_message": "Successful Response",
  "status": "timeout",
  "reference_id": "2021-01-27-14:55:22-abb6966a-a6d4-4a3a-a364-ea3347384a90",
  "proofs": {
    "document": {
      "proof": "https://api.shuftipro.com/storage/proof.png"
    }
  }
 }
```

Successful Response Parameters

Parameter	Type	Description
code	number	0 - for successful response or genesis error code, see below

Parameter	Type	Description
message	string	code description, 'Successful Response' for code - 0
technical_message	string	'Successful Response', or technical error description
status	string	Status of verification, Check Available Statuses Types
reference_id	string	Unique value to identify the performed verification
proofs	object	Contains all the uploaded by customer images that were used to verify data. The Proof URLs returned are temporary and valid for 15 minutes only

---

Error Response

```
{
  "code": 404,
  "message": "Passed attribute is invalid!",
  "technical_message": "The property '#/' did not contain a required property of 'customer_information'"
}
```

```
{
  "code": 803,
  "message": "KYC Services not configured!",
  "technical_message": "KYC Services not configured for Merchant!"
}
```

Error Response Parameters

Parameter	Type	Description
code	number	Genesis internal error code
message	string	Short explanation of occurred error
technical_message	string	More detailed explanation of occurred error

---

Kyc Service Notification

Since identity document verification is time consuming(can take up to 3-7 minutes) it is an asynchronous call. Notification params may vary based on the performed checks. When verification is done a notification will be sent to configured Merchant notification url with all the details of the review along with the risk score. Note that multiple notifications can be expected so please always check the Score Complete parameter as if we have multiple DocumentId Verify providers, the score will be complemented with more info as we receive the data from the KYC sources. The count of expected notifications will be declared in initial IdentityDocumentUpload response.

KYC Notification Example

```
?kyc_source=OCR
&reference_id=1912
&score=10
&score_complete=0
&uid=5486354658
&error_message=
&analysis_ref_uid=148871
&controls_identifier=MODEL_VALIDITY
&controls_title_msg=OK
&controls_result_msg=OK
&controls_result=OK
&controls_control_identifier=MODEL_RECOGNIZED
&controls_control_title_msg=OK
&controls_control_result_msg=OK
&controls_control_result=OK
&document_classification_id_type=V
&document_detail_emit_country=USA
&document_detail_expiration_date_day=23
&document_detail_expiration_date_month=12
&document_detail_expiration_date_year=2004
&document_detail_document_number=555123ABC
&document_detail_extra_infos_data_key=PERSONAL_NUMBER
&document_detail_extra_infos_data_value=IFLND00AMS803085
&document_detail_extra_infos_title=Personal_Number
&holder_detail_last_name=TRAVELER
&holder_detail_first_name=HAPPYPERSON
&holder_detail_nationality=GBR
&holder_detail_gender=F
&holder_detail_birth_date_day=5
&holder_detail_birth_date_month=2
&holder_detail_birth_date_year=1965
&mrz_line1=VIUSATRAVELER_HAPPYPERSON
&mrz_line2=555123ABC6GBR6502056F0412236IFLND00AMS803085
&check_report_summary_check_identifier=SUMMARY_ID_COPY
&check_report_summary_check_title_msg=OK
&check_report_summary_check_result_msg=Original_Document
&check_report_summary_check_result=OK
&notification_type=kyc_service_execution
&signature=secure-signature
```

KYC Verification Request Notification Example

```
?reference_id=2021-01-28-09%3A47%3A50-443bc6b7-1f89-4774-a1f7-24eaf345d605
&verification_url=https%3A%2F%2Fapp.shuftipro.com%2Fprocess%2Fkyc%2FNl7Jpjbg2KIrGuWRUcAx5A7f11h8K1d4gkS1J8SUBaaIepuQ46izboRUEJDkTISq
&status=cancelled
&declined_reason
&email=john.doe1%40example.com
&notification_type=kyc_service_execution
&additional_data=additional_data_object
&signature=secure-signature
```

Notification Parameters Response Parameters

Parameter	Type	Description
kyc_source	string	name of the KYC source performed the validation
reference_id	string	Unique id for reference to document upload request
risk_score	number	Score product of validation rules
external_unique_id	string	Unique ID Reference from External Service Provider
analysis_reference_id	string	UniqueID Reference from Genesis
controls_identifier	string	List of all MAIN controls performed on the document
...	string	Additional information related to verification process
notification_type	string	constant value ”kyc service response”
status	string	Status of verification, Check Available Statuses Types
verification_url	string	URL that should be used by end user to submit verification process, receives only for ”pending” status
email	string	User's email
declined_reason	string	Declined verification reason
additional_data	object	Additional data information related to verification request notification
signature	string	the signature of the notification, should be used to verify the the notification was sent by Genesis

The signature is a security measure meant to ensure that the gateway is really the sender of the notification. It is generated by concatenating the reference id with your API password and generating a SHA-512 Hash (Hex) of the string:

`SHA-512 Hash Hex of [reference_id][Your Merchant API password]`

Notification signature examples

reference_id	API password	signature
1912	password1	ecc5f441366aef60627a7fd2ad31e8c0e6d61d7cc3922e00fcdcf5cfbc2cc5ed67b9a3fa91a2c45ebd37c37acac6c543bed1f1146aea408c22741ffcd137fe75
1818	password2	e03a2cdda2d75b7522a1c0b14d078ef017b000aa419c872a1e6489b8dd287e6bc6573feece5cf0db9bd3e6711eb9a7cf65a29b7a13ba5bad1de13d16ba448283

When receiving the notification, you are required to render an XML page containing the transaction's reference id so that the gateway knows that you have accepted the notification. If the XML is not delivered, the notification is sent periodically as per the rules for notifications delivery.

```
<?xml version="1.0" encoding="UTF-8"?>
<notification_echo>
  <notification_echo>reference_id</notification_echo>
</notification_echo>
```

Genesis Fx Services

General Info

Genesis Fx(Forex) Services provides the ability to retrieve up-to-date Fx rates. The API is synchronous and is based on RESTFul practices. Be sure to set Content-type: application/json in your headers.

To interact with the Fx API, you need to provide login credentials using standard HTTP Basic Authentication. (credentials can be found in your Admin interface.)

Get Tiers

This call is used to return all Tiers that are related to your account.

`GET /v1/fx/tiers`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/fx/tiers \
  -X GET \
```

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
[
  {
    "id": 1,
    "name": "Tier Name",
    "description": "Tier Description",
    "tier_id": "Tier Identifier",
    "enabled": true
  }
]
```

Successful Response Parameters

Parameter	Type	Description
id	number	tier id - 1
name	string	name of the tier
description	string	description of the tier
tier_id	string	identification of the tier

Parameter	Type	Description
enabled	boolean	state of the tier

Get Tier

This call is used to return information about selected Tier for your merchant.

`GET /v1/fx/tiers/:id`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/fx/tiers/1 \
  -X GET \
```

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
{
  "id": 1,
  "name": "Tier Name",
  "description": "Tier Description",
  "tier_id": "Tier Identifier",
  "enabled": true
}
```

Successful Response Parameters

Parameter	Type	Description
id	number	tier id - 1
name	string	name of the tier
description	string	description of the tier
tier_id	string	identification of the tier
enabled	boolean	state of the tier

Get Rates

This call is used to return all rates for Tier.

`GET /v1/fx/tiers/:tier_id/rates`

Note: `:tier_id` is the ID of Tier, not to be mistaken with `:tier_id` of the same entity.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/fx/tiers/1/rates \
  -X GET \
```

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
[
  {
    "id": 1,
    "source_currency": "Tier Name",
    "target_currency": "Tier Description",
    "trading_rate": "Tier Identifier",
    "enabled": null
  }
]
```

Successful Response Parameters

Parameter	Type	Description
id	number	rate id - 1
source_currency	string	source currency of the rate
target_currency	string	target currency of the rate
trading_rate	string	trading rate

Get Rate

This call is used to return information about selected Rate for merchant.`GET /v1/fx/tiers/:tier_id/rates/:id`

Note: `:tier_id` is the ID of Tier, not to be mistaken with `:tier_id` of the same entity.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/fx/tiers/1/rates/1 \
  -X GET \
```

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
{
  "id": 1,
  "source_currency": "Tier Name",
  "target_currency": "Tier Description",
  "trading_rate": "Tier Identifier",
  "enabled": null
}
```

Successful Response Parameters

Parameter	Type	Description
id	number	rate id - 1

Parameter	Type	Description
source_currency	string	source currency of the rate
target_currency	string	target currency of the rate
trading_rate	string	trading rate

Search Rate

This call is used to return information about selected Rate by currency pair.

`POST /v1/fx/tiers/:tier_id/rates/search`

Note: `:tier_id` is the ID of Tier, not to be mistaken with `:tier_id` of the same entity.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/fx/tiers/:tier_id/rates/search \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "source_currency": "EUR",
   "target_currency": "USD"
 }'
```

Request Parameters

Parameter	Required	Format	Description
source_currency	required	string	source currency
target_currency	required	string	target currency

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
 {
   "id": 1,
   "source_currency": "Tier Name",
   "target_currency": "Tier Description",
   "trading_rate": "Tier Identifier",
   "enabled": null
 }
```

Successful Response Parameters

Parameter	Type	Description
id	number	rate id - 1
source_currency	string	source currency of the rate
target_currency	string	target currency of the rate
trading_rate	string	trading rate

Consumers

Introduction

The Consumer entity brings Tokenization, Transactions and Web Payment Forms (WPF) together. It is a representation of a customer that can serve different purposes. A consumer is identified by providing both consumer ID and email. It is *explicitly* created via our Consumer API or *implicitly* by providing `customer_email` in either Transactions or WPF APIs. The main purpose of consumers is to group web payment forms and payment transactions. Using the merchant console, one can track consumers and find high-volume ones. The other role of consumers is to provide simplified, one-step tokenization of cardholder details. For Processing API that means securely storing card data in exchange for a token, which can be used for future payments. For WPF, customers can choose either to use previously stored cards or remember a new payment method.

Consumer API

CREATE CONSUMER

Creates a consumer based on email address. Optionally, one can provide billing and shipping address. Addresses will be used, if none given, in Processing or WPF APIs.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/create_consumer/ \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <create_consumer_request>
    <email>consumer@email.com</email>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <shipping_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10001</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </shipping_address>
  </create_consumer_request>'
```

Request Parameters

Parameter	Required	Format	Description
email	required	email address	The consumer email address must be unique. If another consumer exists with this email address, the request will be rejected.
billing_address	optional		See Required vs Optional API params for details
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
shipping_address	optional		

Parameter	Required	Format	Description
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<create_consumer_response>
  <consumer_id>123456</consumer_id>
  <email>consumer@email.com</email>
  <status>enabled</status>
</create_consumer_response>
```

Successful Response Parameters

Parameter	Type	Description
consumer_id	string(10)	Consumer unique reference
email	email address	Consumer email address
status	string	Status of the consumer

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<create_consumer_response>
  <status>error</status>
  <code>330</code>
  <technical_message>Invalid email format!</technical_message>
  <message>Something went wrong, please contact support!</message>
</create_consumer_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the consumer
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

RETRIEVE CONSUMER

Retrieves consumer details based on consumer id or email.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/retrieve_consumer/ \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <retrieve_consumer_request>
    <consumer_id>123456</consumer_id>
  </retrieve_consumer_request>'
```

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/retrieve_consumer/ \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <retrieve_consumer_request>
    <email>consumer@email.com</email>
  </retrieve_consumer_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference. Required if the email is not provided
email	required	email address	Consumer email address. Required if the consumer_id is not provided

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
  <?xml version="1.0" encoding="UTF-8"?>
  <retrieve_consumer_response>
    <consumer_id>123456</consumer_id>
    <email>consumer@email.com</email>
    <status>enabled</status>
  </retrieve_consumer_response>
```

Successful Response Parameters

Parameter	Type	Description
consumer_id	string(10)	Consumer unique reference
email	email address	Consumer email address
status	string	Status of the consumer

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<retrieve_consumer_response>
  <status>error</status>
  <code>702</code>
  <technical_message>Consumer not found!</technical_message>
  <message>Something went wrong, please contact support!</message>
</retrieve_consumer_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the consumer
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

UPDATE CONSUMER

Updates consumer email and addresses.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/update_consumer/ \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <update_consumer_request>
   <consumer_id>123456</consumer_id>
   <email>consumer@email.com</email>
   <billing_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10178</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </billing_address>
   <shipping_address>
     <first_name>Travis</first_name>
     <last_name>Pastrana</last_name>
     <address1>Muster Str. 12</address1>
     <zip_code>10001</zip_code>
     <city>Los Angeles</city>
     <state>CA</state>
     <country>US</country>
   </shipping_address>
 </update_consumer_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference
email	required	email address	New email address
billing_address	optional		See Required vs Optional API params for details
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City

Parameter	Required	Format	Description
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166
shipping_address	optional		
first_name	optional	string(255)	Customer first name
last_name	optional	string(255)	Customer last name
address1	optional	string(255)	Primary address
address2	optional	string(255)	Secondary address
zip_code	optional	string	ZIP code
city	optional	string(255)	City
state	optional	string(2)	State code in ISO 3166-2, required for USA and Canada
country	optional	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<update_consumer_response>
  <consumer_id>123456</consumer_id>
  <email>consumer@email.com</email>
  <status>enabled</status>
</update_consumer_response>
```

Successful Response Parameters

Parameter	Type	Description
consumer_id	string(10)	Consumer unique reference
email	email address	Consumer email address
status	string	Status of the consumer

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<update_consumer_response>
  <status>error</status>
  <code>702</code>
  <technical_message>Consumer not found!</technical_message>
  <message>Something went wrong, please contact support!</message>
</update_consumer_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the consumer
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).

Parameter	Type	Description
message	string(255)	Human readable error message which can be displayed to users.

DISABLE CONSUMER

Disable consumer from usage until further action.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/disable_consumer/ \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <disable_consumer_request>
   <consumer_id>123456</consumer_id>
   <email>consumer@email.com</email>
 </disable_consumer_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference
email	required	email address	Consumer email address

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<disable_consumer_response>
  <consumer_id>123456</consumer_id>
  <email>consumer@email.com</email>
  <status>disabled</status>
</disable_consumer_response>
```

Successful Response Parameters

Parameter	Type	Description
consumer_id	string(10)	Consumer unique reference
email	email address	Consumer email address
status	string	Status of the consumer

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<disable_consumer_response>
  <status>error</status>
  <code>702</code>
  <technical_message>Consumer not found!</technical_message>
  <message>Something went wrong, please contact support!</message>
</disable_consumer_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the consumer
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

ENABLE CONSUMER

Enable consumer that was disabled in the past.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/enable_consumer/ \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <enable_consumer_request>
   <consumer_id>123456</consumer_id>
   <email>consumer@email.com</email>
 </enable_consumer_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference
email	required	email address	Consumer email address

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<enable_consumer_response>
  <consumer_id>123456</consumer_id>
  <email>consumer@email.com</email>
  <status>enabled</status>
</enable_consumer_response>
```

Successful Response Parameters

Parameter	Type	Description
consumer_id	string(10)	Consumer unique reference
email	email address	Consumer email address
status	string	Status of the consumer

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<enable_consumer_response>
  <status>error</status>
  <code>702</code>
  <technical_message>Consumer not found!</technical_message>
  <message>Something went wrong, please contact support!</message>
</enable_consumer_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the consumer
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

GET CONSUMER CARDS

Get previously tokenized card details for a consumer.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/get_consumer_cards/ \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <get_consumer_cards_request>
  <consumer_id>123456</consumer_id>
  <email>consumer@email.com</email>
 </get_consumer_cards_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference
email	required	email address	Consumer email address

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<get_consumer_cards_response>
  <total>1</total>
  <card>
    <card_number>409603...0106</card_number>
    <card_holder>Travis Pastrana</card_holder>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <card_brand>master</card_brand>
  </card>
</get_consumer_cards_response>
```

Successful Response Parameters

Parameter	Type	Description
total	string(255)	Number of non-expired consumer cards

Parameter	Type	Description
card		
card_number		
card_holder		
expiration_month		
expiration_year		
card_brand		

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<get_consumer_cards_response>
  <status>error</status>
  <code>702</code>
  <technical_message>Consumer not found!</technical_message>
  <message>Something went wrong, please contact support!</message>
</get_consumer_cards_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the consumer
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

Tokenization

Introduction

Tokenization is the process of replacing sensitive cardholder data with a surrogate value ("token"). The data to be tokenized must include at least the primary account number (PAN).

Tokenization greatly reduces the sensitive data that businesses need to store, thus improving security of credit card transactions and minimizing the costs related to PCI DSS compliance.

We issue reversible non-cryptographic tokens to merchants via our Tokenization API and take care to store safely the tokenized cardholder data. Merchants are able to use the issued tokens instead of the cardholder data when creating credit card transactions via our Processing API. PCI DSS compliant merchants have also the possibility to exchange the token for the original cardholder data via our Tokenization API ("detokenization").

Tokenization API

ACCEPTED CARDHOLDER PARAMETERS

All cardholder data parameters are accepted for tokenization - card number, cardholder, expiration year, expiration month. Please note - CVV is not accepted.

CONSUMER REQUIRED

An enabled consumer is required in order to use this API. You have to create one or use existing, please check Consumer API.

TOKENIZE

Tokenizes cardholder data and issues a corresponding token. Merchants should take care to save the plain-text token value in their system as once issued it is not possible to obtain it again. Attempting to tokenize the same cardholder data will issue a new token. The token can be used in the Processing API instead of the cardholder data.

> Please note, CVV can't be part of the cardholder data.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/tokenize/ \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <tokenize_request>
   <consumer_id>123456</consumer_id>
   <email>consumer@email.com</email>
   <token_type>uuid</token_type>
   <card_data>
     <card_number>4200000000000000</card_number>
     <card_holder>John Doe</card_holder>
     <expiration_month>05</expiration_month>
     <expiration_year>2022</expiration_year>
   </card_data>
 </tokenize_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference
email	required	e-mail address	Consumer e-mail address
token_type	required	uuid	Token type format
card_data	required		
card_number	required	string(13..21)	Complete cc number of customer
card_holder	optional	string(255)	Full name of customer as printed on credit card (first name and last name at least)
expiration_month	optional	MM	Expiration month as printed on credit card
expiration_year	optional	YYYY	Expiration year as printed on credit card

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
 <?xml version="1.0" encoding="UTF-8"?>
 <tokenize_response>
   <status>active</status>
   <token_id>34567</token_id>
   <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
   <token_type>uuid</token_type>
   <consumer_id>123456</consumer_id>
 </tokenize_response>
```

Successful Response Parameters

Parameter	Type	Description
status	string	Status of the token
token_id	string(32)	Unique token id
token	string(36)	Plain-text token value
token_type	uuid	Token type format
consumer_id	string(10)	Consumer unique reference

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<tokenize_response>
  <status>error</status>
  <code>720</code>
  <technical_message>Invalid token type!</technical_message>
  <message>Something went wrong, please contact support!</message>
</tokenize_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the token
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

DETOKENIZE

Exchanges the token with the tokenized cardholder data

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/detokenize/ \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <detokenize_request>
   <consumer_id>123456</consumer_id>
   <email>consumer@email.com</email>
   <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
   <token_type>uuid</token_type>
 </detokenize_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference
email	required	e-mail address	Consumer e-mail address
token	required	string(36)	Plain-text token value
token_type	required	uuid	Token type format

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<detokenize_response>
  <status>active</status>
  <token_id>34567</token_id>
  <token_type>uuid</token_type>
  <card_data>
    <card_number>4200000000000000</card_number>
    <card_holder>John Doe</card_holder>
    <expiration_month>05</expiration_month>
    <expiration_year>2022</expiration_year>
  </card_data>
</detokenize_response>
```

Successful Response Parameters

Parameter	Type	Description
status	string	Status of the token
token_id	string(32)	Unique token id
token	string(36)	Plain-text token value
token_type	uuid	Token type format
card_data		
card_number		
card_holder		
expiration_month		
expiration_year		

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<detokenize_response>
  <status>error</status>
  <code>730</code>
  <technical_message>Invalid token!</technical_message>
  <message>Something went wrong, please contact support!</message>
</detokenize_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the token
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

UPDATE TOKEN

Updates the tokenized data corresponding to an existing valid token.

> Please note, PAN can't be updated

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/update_token/ \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <update_token_request>
   <consumer_id>123456</consumer_id>
   <email>consumer@email.com</email>
   <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
   <token_type>uuid</token_type>
   <card_data>
     <card_number>4200000000000000</card_number>
     <card_holder>John Doe</card_holder>
     <expiration_month>05</expiration_month>
     <expiration_year>2022</expiration_year>
   </card_data>
 </update_token_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference
email	required	e-mail address	Consumer e-mail address
token	required	string(36)	Plain-text token value
token_type	required	uuid	Token type format
card_data	required		
card_number	required	string(13..21)	Complete cc number of customer
card_holder	optional	string(255)	Full name of customer as printed on credit card (first name and last name at least)
expiration_month	optional	MM	Expiration month as printed on credit card
expiration_year	optional	YYYY	Expiration year as printed on credit card

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
 <?xml version="1.0" encoding="UTF-8"?>
 <update_token_response>
   <status>active</status>
   <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
   <token_type>uuid</token_type>
 </update_token_response>
```

Successful Response Parameters

Parameter	Type	Description
status	string	Status of the token
token	string(36)	Plain-text token value
token_type	uuid	Token type format

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<update_token_response>
  <status>error</status>
  <code>730</code>
  <technical_message>Invalid token!</technical_message>
  <update_token_response>message'</update_token_response>
</update_token_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the token
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

VALIDATE TOKEN

Validates if a token is active, owned by a merchant, etc.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/validate_token/ \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <validate_token_request>
  <consumer_id>123456</consumer_id>
  <email>consumer@email.com</email>
  <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
  <token_type>uuid</token_type>
 </validate_token_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference
email	required	e-mail address	Consumer e-mail address
token	required	string(36)	Plain-text token value
token_type	required	uuid	Token type format

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<validate_token_response>
  <status>active</status>
  <token_id>34567</token_id>
  <token_type>uuid</token_type>
</validate_token_response>
```

Successful Response Parameters

Parameter	Type	Description
status	string	Status of the token

Parameter	Type	Description
token_id	string(32)	Unique token id
token_type	uuid	Token type format

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<validate_token_response>
  <status>error</status>
  <code>720</code>
  <technical_message>Invalid token type!</technical_message>
  <message>Something went wrong, please contact support!</message>
</validate_token_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the token
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

DELETE TOKEN

Deletes a token.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/delete_token/ \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <delete_token_request>
   <consumer_id>123456</consumer_id>
   <email>consumer@email.com</email>
   <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
   <token_type>uuid</token_type>
 </delete_token_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference
email	required	e-mail address	Consumer e-mail address
token	required	string(36)	Plain-text token value
token_type	required	uuid	Token type format

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<delete_token_response>
  <status>active</status>
  <token_id>34567</token_id>
  <token_type>uuid</token_type>
</delete_token_response>
```

Successful Response Parameters

Parameter	Type	Description
status	string	Status of the token
token_id	string(32)	Unique token id
token_type	uuid	Token type format

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<delete_token_response>
  <status>error</status>
  <code>720</code>
  <technical_message>Invalid token type!</technical_message>
  <message>Something went wrong, please contact support!</message>
</delete_token_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the token
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

GET CARD

Exchanges the token with the tokenized masked cardholder data

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/get_card/ \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <get_card_request>
   <consumer_id>123456</consumer_id>
   <email>consumer@email.com</email>
   <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
   <token_type>uuid</token_type>
 </get_card_request>'
```

Request Parameters

Parameter	Required	Format	Description
consumer_id	required	string(10)	Consumer unique reference

Parameter	Required	Format	Description
email	required	e-mail address	Consumer e-mail address
token	required	string(36)	Plain-text token value
token_type	required	uuid	Token type format

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<get_card_response>
  <status>active</status>
  <token_id>34567</token_id>
  <token_type>uuid</token_type>
  <card_data>
    <card_number>420000...0000</card_number>
    <card_holder>John Doe</card_holder>
    <expiration_month>05</expiration_month>
    <expiration_year>2022</expiration_year>
    <card_brand>visa</card_brand>
  </card_data>
</get_card_response>
```

Successful Response Parameters

Parameter	Type	Description
status	string	Status of the token
token_id	string(32)	Unique token id
token	string(36)	Plain-text token value
token_type	uuid	Token type format
card_data		
card_number		
card_holder		
expiration_month		
expiration_year		

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<detokenize_response>
  <status>error</status>
  <code>730</code>
  <technical_message>Invalid token!</technical_message>
  <message>Something went wrong, please contact support!</message>
</detokenize_response>
```

Error Response Parameters

Parameter	Type	Description
status	string	Status of the token
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).

Parameter	Type	Description
message	string(255)	Human readable error message which can be displayed to users.

How to tokenize cardholder data in Processing API

In order to tokenize card details you need to set the `remember_card` flag to "true".

CREATE A CONSUMER

Please provide `customer_email` in addition to cardholder details and the `remember_card` flag. This will create a consumer and tokenize cardholder details. `consumer_id` and `token` will be returned in the response and notification. `consumer_id` will be returned in the reconcile response.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setRememberCard('true');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setRememberCard("true");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "remember_card": "true"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://staging.gate.e-comprocessing.net/process/TERMINAL_TOKEN/ \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <remember_card>true</remember_card>
  </payment_transaction>'
```

USE EXISTING CONSUMER

Please provide `consumer_id` and `customer_email` in addition to cardholder details and the `remember_card` flag. An existing consumer will be used, if identified. `consumer_id` and `token` will be returned in the response and notification. `consumer_id` will be returned in the reconcile response.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')
        ->setRememberCard('true')
        ->setConsumerId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");
    request.setRememberCard("true");
    request.setConsumerId("123456");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "expiration_month": "12",
    "expiration_year": 2022,
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "remember_card": "true",
    "consumer_id": "123456"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://staging.gate.e-comprocessing.net/process/TERMINAL_TOKEN/ \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <remember_card>true</remember_card>
    <consumer_id>123456</consumer_id>
  </payment_transaction>'
```

How to use tokens in Processing API

REQUESTS

Merchants can substitute cardholder parameters with tokens in the request when creating credit card transactions via our Processing API. Please note: merchants may choose to tokenize all cardholder parameters or only a subset. In the latter case the remaining parameters would need to be provided in the request. An enabled consumer is required to use tokens in Processing API. Please provide `consumer_id` and `customer_email` along with the `token`.

All Cardholder Parameters Have Been Tokenized

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setToken('ee946db8-d7db-4bb7-b608-b65b153e127d')
        ->setCvv('834')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')
        ->setConsumerId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setToken("ee946db8-d7db-4bb7-b608-b65b153e127d");
    request.setCvv("834");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");
    request.setConsumerId("123456");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "token": "ee946db8-d7db-4bb7-b608-b65b153e127d",
    "cvv": "834",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "consumer_id": "123456"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://staging.gate.e-comprocessing.net/process/TERMINAL_TOKEN/ \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
    <cvv>834</cvv>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <consumer_id>123456</consumer_id>
  </payment_transaction>'
```

Only Pan Has Been Tokenized

Request

```
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setToken('ee946db8-d7db-4bb7-b608-b65b153e127d')
        ->setCardHolder('Travis Pastrana')
        ->setCvv('834')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')
        ->setConsumerId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setToken("ee946db8-d7db-4bb7-b608-b65b153e127d");
    request.setCardHolder("Travis Pastrana");
    request.setCvv("834");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");
    request.setConsumerId("123456");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "token": "ee946db8-d7db-4bb7-b608-b65b153e127d",
    "card_holder": "Travis Pastrana",
    "cvv": "834",
    "expiration_month": "12",
    "expiration_year": 2022,
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "consumer_id": "123456"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://staging.gate.e-comprocessing.net/process/TERMINAL_TOKEN/ \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>sale</transaction_type>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <token>ee946db8-d7db-4bb7-b608-b65b153e127d</token>
    <card_holder>Travis Pastrana</card_holder>
    <cvv>834</cvv>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <consumer_id>123456</consumer_id>
  </payment_transaction>'
```

How to tokenize cardholder data in WPF API

In order to offer saving a payment method for future use, set the `remember_card` flag to "true".

CREATE A CONSUMER

Please provide `customer_email` in addition to the `remember_card` flag. This will create a consumer and offer the user to save cardholder details (tokenize). `consumer_id` will be returned in the response and reconcile response. `consumer_id` and `token` will be returned in the notification.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('WPF\Create');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setDescription('You are about to buy 3 shoes at www.shoes.com!')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnCancelUrl('http://www.example.com/cancel.html')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')
        ->setLifetime('60')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // Risk Params
        ->setRiskUserId('123456')


        // Transaction Types
        ->addTransactionType('authorize')
        ->addTransactionType('sale')
        ->setRememberCard('true');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.wpf.WPFCreateRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    WPFCreateRequest request = new WPFCreateRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setDescription("You are about to buy 3 shoes at www.shoes.com!");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setReturnCancelUrl(new URL("http://www.example.com/cancel.html"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");
    request.setLifetime(60);


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Risk Params
    request.setRiskUserId("123456");


    // Transaction Types
    request.addTransactionType("authorize").done();
    request.addTransactionType("sale").done();
    request.setRememberCard("true");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.wpf_create(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "description": "You are about to buy 3 shoes at www.shoes.com!",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "return_cancel_url": "http://www.example.com/cancel.html",
    "amount": "100",
    "currency": "USD",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "lifetime": 60,
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "risk_params": {
      "user_id": "123456"
    },
    "transaction_types": [
      "authorize",
      "sale"
    ],
    "remember_card": "true"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://staging.wpf.e-comprocessing.net/wpf \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <wpf_payment>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <description>You are about to buy 3 shoes at www.shoes.com!</description>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_cancel_url>http://www.example.com/cancel.html</return_cancel_url>
    <amount>100</amount>
    <currency>USD</currency>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <lifetime>60</lifetime>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
    <transaction_types>
      <transaction_type>authorize</transaction_type>
      <transaction_type>sale</transaction_type>
    </transaction_types>
    <remember_card>true</remember_card>
  </wpf_payment>'
```

USE EXISTING CONSUMER

Please provide `consumer_id` and `customer_email` in addition to the `remember_card` flag. An existing consumer will be used, if identified, and offer the user to save cardholder details (tokenize). `consumer_id` will be returned in the response and reconcile response. `consumer_id` and `token` will be returned in the notification.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('WPF\Create');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setDescription('You are about to buy 3 shoes at www.shoes.com!')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnCancelUrl('http://www.example.com/cancel.html')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')
        ->setLifetime('60')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // Risk Params
        ->setRiskUserId('123456')


        // Transaction Types
        ->addTransactionType('authorize')
        ->addTransactionType('sale')
        ->setRememberCard('true')
        ->setConsumerId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.wpf.WPFCreateRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    WPFCreateRequest request = new WPFCreateRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setDescription("You are about to buy 3 shoes at www.shoes.com!");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setReturnCancelUrl(new URL("http://www.example.com/cancel.html"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");
    request.setLifetime(60);


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Risk Params
    request.setRiskUserId("123456");


    // Transaction Types
    request.addTransactionType("authorize").done();
    request.addTransactionType("sale").done();
    request.setRememberCard("true");
    request.setConsumerId("123456");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.wpf_create(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "description": "You are about to buy 3 shoes at www.shoes.com!",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "return_cancel_url": "http://www.example.com/cancel.html",
    "amount": "100",
    "currency": "USD",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "lifetime": 60,
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "risk_params": {
      "user_id": "123456"
    },
    "transaction_types": [
      "authorize",
      "sale"
    ],
    "remember_card": "true",
    "consumer_id": "123456"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://staging.wpf.e-comprocessing.net/wpf \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <wpf_payment>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <description>You are about to buy 3 shoes at www.shoes.com!</description>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_cancel_url>http://www.example.com/cancel.html</return_cancel_url>
    <amount>100</amount>
    <currency>USD</currency>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <lifetime>60</lifetime>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
    <transaction_types>
      <transaction_type>authorize</transaction_type>
      <transaction_type>sale</transaction_type>
    </transaction_types>
    <remember_card>true</remember_card>
    <consumer_id>123456</consumer_id>
  </wpf_payment>'
```

How to use tokens in WPF API

Please provide `consumer_id` and `customer_email`. An existing consumer will be used, if identified, and offer the user to select a previously stored card for payment.

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('WPF\Create');
    $request = $genesis->request();

    $request
        ->setTransactionId('119643250547501c79d8295')
        ->setUsage('40208 concert tickets')
        ->setDescription('You are about to buy 3 shoes at www.shoes.com!')
        ->setNotificationUrl('https://www.example.com/notification')
        ->setReturnSuccessUrl('http://www.example.com/success')
        ->setReturnFailureUrl('http://www.example.com/failure')
        ->setReturnCancelUrl('http://www.example.com/cancel.html')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCustomerEmail('travis@example.com')
        ->setCustomerPhone('+1987987987987')
        ->setLifetime('60')


        // Billing Address
        ->setBillingFirstName('Travis')
        ->setBillingLastName('Pastrana')
        ->setBillingAddress1('Muster Str. 12')
        ->setBillingZipCode('10178')
        ->setBillingCity('Los Angeles')
        ->setBillingState('CA')
        ->setBillingCountry('US')


        // Risk Params
        ->setRiskUserId('123456')


        // Transaction Types
        ->addTransactionType('authorize')
        ->addTransactionType('sale')
        ->setConsumerId('123456');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.wpf.WPFCreateRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;
import java.net.MalformedURLException;
import java.net.URL;

public class GenesisExample {
  public static void main() throws MalformedURLException {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    WPFCreateRequest request = new WPFCreateRequest();

    request.setTransactionId("119643250547501c79d8295");
    request.setUsage("40208 concert tickets");
    request.setDescription("You are about to buy 3 shoes at www.shoes.com!");
    request.setNotificationUrl(new URL("https://www.example.com/notification"));
    request.setReturnSuccessUrl(new URL("http://www.example.com/success"));
    request.setReturnFailureUrl(new URL("http://www.example.com/failure"));
    request.setReturnCancelUrl(new URL("http://www.example.com/cancel.html"));
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCustomerEmail("travis@example.com");
    request.setCustomerPhone("+1987987987987");
    request.setLifetime(60);


    // Billing Address
    request.setBillingFirstname("Travis");
    request.setBillingLastname("Pastrana");
    request.setBillingPrimaryAddress("Muster Str. 12");
    request.setBillingZipCode("10178");
    request.setBillingCity("Los Angeles");
    request.setBillingState("CA");
    request.setBillingCountry("US");


    // Risk Params
    request.setRiskUserId("123456");


    // Transaction Types
    request.addTransactionType("authorize").done();
    request.addTransactionType("sale").done();
    request.setConsumerId("123456");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.wpf_create(
  {
    "transaction_id": "119643250547501c79d8295",
    "usage": "40208 concert tickets",
    "description": "You are about to buy 3 shoes at www.shoes.com!",
    "notification_url": "https://www.example.com/notification",
    "return_success_url": "http://www.example.com/success",
    "return_failure_url": "http://www.example.com/failure",
    "return_cancel_url": "http://www.example.com/cancel.html",
    "amount": "100",
    "currency": "USD",
    "customer_email": "travis@example.com",
    "customer_phone": "+1987987987987",
    "lifetime": 60,
    "billing_address": {
      "first_name": "Travis",
      "last_name": "Pastrana",
      "address1": "Muster Str. 12",
      "zip_code": "10178",
      "city": "Los Angeles",
      "state": "CA",
      "country": "US"
    },
    "risk_params": {
      "user_id": "123456"
    },
    "transaction_types": [
      "authorize",
      "sale"
    ],
    "consumer_id": "123456"
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://staging.wpf.e-comprocessing.net/wpf \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <wpf_payment>
    <transaction_id>119643250547501c79d8295</transaction_id>
    <usage>40208 concert tickets</usage>
    <description>You are about to buy 3 shoes at www.shoes.com!</description>
    <notification_url>https://www.example.com/notification</notification_url>
    <return_success_url>http://www.example.com/success</return_success_url>
    <return_failure_url>http://www.example.com/failure</return_failure_url>
    <return_cancel_url>http://www.example.com/cancel.html</return_cancel_url>
    <amount>100</amount>
    <currency>USD</currency>
    <customer_email>travis@example.com</customer_email>
    <customer_phone>+1987987987987</customer_phone>
    <lifetime>60</lifetime>
    <billing_address>
      <first_name>Travis</first_name>
      <last_name>Pastrana</last_name>
      <address1>Muster Str. 12</address1>
      <zip_code>10178</zip_code>
      <city>Los Angeles</city>
      <state>CA</state>
      <country>US</country>
    </billing_address>
    <risk_params>
      <user_id>123456</user_id>
    </risk_params>
    <transaction_types>
      <transaction_type>authorize</transaction_type>
      <transaction_type>sale</transaction_type>
    </transaction_types>
    <consumer_id>123456</consumer_id>
  </wpf_payment>'
```

Supported transaction types

All transaction types accepting cardholder data are supported -Account Verification, Authorize, Authorize3D, Sale, Sale3D, InitRecurringSale, InitRecurringSale3D, Payout, Intersolve, Fashioncheque.

Importation of external tokens and card details

CSV FILE FORMAT

CSV file headers:

Header	req?	Description
token	required	Plain-text token value (merchant/PSP token to migrate to us)
token_type	optional	Token type format
status	optional	Status of the token
card_number	required	Credit card number
card_holder	required	Full name of customer as printed on cc (first name and last name at least)
expiration_month	required	Expiration month as printed on credit card
expiration_year	required	Expiration year as printed on credit card
email	required	Customer email
first_name	optional	Customer first name used for billing address details
last_name	optional	Customer last name used for billing address details
address1	optional	Customer primary address used for billing address details
address2	optional	Customer secondary address used for billing address details
zip_code	optional	Zip code used for billing address details
city	optional	Customer city used for billing address details
state	optional	State code in ISO 3166-2, required for USA and Canada, used for billing address details
country	optional	Country code in ISO 3166 used for billing address details

CSV file delimiter must be ',' (comma).

ENCRYPTION OF THE CSV FILE

The CSV contains sensitive data and therefore it must be encrypted. A public GPG key should be used for this purpose.

Command to encrypt the file. It will generate encrypted file ending with .gpg extension:

```
gpg --encrypt --recipient test@email.com test_token_file.csv
```

UPLOADING THE ENCRYPTED CSV FILE TO REMOTE SFTP SERVER

Once the CSV file is encrypted it must be uploaded to our remote SFTP server for processing and importing its content.

The remote SFTP connection has the following options which should be provided on demand (please, contacttech-support@e-comprocessing.com for more details):

host - host where the remote SFTP server is located (ex. 1.2.3.4)
user - user allowed to connect to the remote SFTP server (ex. TEST_USER)
port - port listening for SFTP connections (ex. 12345)
directory - directory to upload/download encrypted CSV files (ex. import_dir/)
ssh_key - SSH key to authenticate the relevant user

Commands to upload the encrypted CSV file to remote SFTP server:

```
sftp -i "path-to-the-ssh-key-file" -P 12345 TEST_USER@1.2.3.4:import_dir/
```

Once connected to the remote SFTP:

```
sftp> put test_tokens_file.csv.gpg
Uploading test_tokens_file.csv.gpg to /import_dir/test_tokens_file.csv.gpg
sftp> quit
```

DOWNLOADING A RESPONSE CSV FILE FROM THE REMOTE SFTP SERVER

Once the tokens are imported in Genesis together with the relevant card details, a response CSV file would be generated. It will contain mapping between the tokens and the consumer ids and emails associated with them. They would be needed for successful usage of the imported tokens.

Commands to retrieve the response CSV files from the remote SFTP server:

```
sftp -i "path-to-the-ssh-key-file" -P 12345 TEST_USER@1.2.3.4:import_dir/
```

Once connected to the remote SFTP:

```
sftp> get test_tokens_file_response.csv
Fetching /import_dir/test_tokens_file_response.csv to test_tokens_file_response.csv
sftp> quit
```

Transaction API

Transaction Card Expiry Date Update API

Each card-based transaction has an expiration date, which can be updated using the Transaction Card Expiry Date Update API.

The API endpoint is suitable for recurring payments where the card has been renewed and has now a different expiration date.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/v1/transaction/expiry_date/:transaction_unique_id \
  -X PUT \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <update_card_expiration_request>
   <expiration_month>12</expiration_month>
   <expiration_year>2022</expiration_year>
 </update_card_expiration_request>'
```

Request Parameters

Parameter	Required	Format	Description
expiration_month	required	MM	Expiration month as printed on credit card
expiration_year	required	YYYY	Expiration year as printed on credit card

`required* = conditionally required`

The provided expiration date must be in the future and after the current expiration date of the payment transaction

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<update_card_expiration_response>
  <status>success</status>
  <code>200</code>
  <message>Card expiry date updated successfully!</message>
</update_card_expiration_response>
```

Successful Response Parameters

Parameter	Type	Description
status	string(255)	Status of the response
code	integer	Successful code (200)
message	string(255)	Human readable error message which can be displayed to users.

Error Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<update_card_expiration_response>
  <status>error</status>
  <code>300</code>
  <technical_message>The provided expiration date must be in the future and after the current one</technical_message>
  <message>Please check input data for errors!</message>
</update_card_expiration_response>
```

Error Response Parameters

Parameter	Type	Description
status	string(255)	Status of the response
code	integer	Error code according to Error code table
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).
message	string(255)	Human readable error message which can be displayed to users.

APM Services

Alipay Register Merchant

Introduction

Alipay Register Merchant call allows to register merchants of online payments into Alipay system or to update the registration information of merchants.

To interact with the Alipay Register Merchant API, you need to provide login credentials using standard HTTP Basic Authentication. Be sure to set Content-type: application/json in your headers. Replace terminal_id in the request with the desired terminal ID.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/alipay/register_merchant/:terminal_token \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "merchant_type": "ENTERPRISE",
   "site_information": {
     "type": "APP",
     "url": "https://example.com",
     "name": "Example"
   },
   "contact_number": "1234567",
   "registration_number": "1234567",
   "representative_id": "1234567",
   "representative_name": "Your Name"
 }'
```

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
 {
   "success": "true"
 }
```

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/alipay/register_merchant/:terminal_token \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "merchant_type": "INDIVIDUAL",
   "site_information": {
     "type": "WEB",
     "url": "https://example.com",
     "name": "Example"
   },
   "contact_number": "1234567",
   "registration_number": "1234567",
   "shareholder_id": "1234567",
   "shareholder_name": "Your Name"
 }'
```

Request Parameters

Parameter	Required	Format	Description
merchant_type	required	string	Merchant type, the value can be INDIVIDUAL for the sole proprietorship or ENTERPRISE.
site_information	required	object	This field is in JSON object. See site_infos for details.
shareholder_id	required*	string(128)	ID or passport number, or business registration number of the primary shareholder of the merchant. Specify this field only when the merchant type is ENTERPRISE.
shareholder_name	required*	string(64)	Legal name of the primary shareholder of the merchant. Specify this field only when the merchant type is ENTERPRISE.
registration_number	required*	string(128)	Business registration number specified on the business registration document. Note: This field is not required when the merchant type is INDIVIDUAL and no registration number exists.
representative_name	required*	string(64)	Full legal name of the business owner. Specify this field only when the merchant type is INDIVIDUAL. This field is optional if the merchant type is ENTERPRISE.
representative_id	required*	string(128)	ID or passport number of the business owner. Specify this field only when the merchant type is INDIVIDUAL. This field is optional if the merchant type is ENTERPRISE.
settlement_number	optional	string(64)	Settlement bank account number of the merchant. Use letters and numbers only.
contact_number	required	string(64)	Contact phone number of the merchant, numbers and special characters +-() only.

Parameter	Required	Format	Description
contact_email	optional	string(128)	Contact email address of the merchant.
customer_service_number	optional	string(64)	Customer service phone number of the merchant, numbers and special characters +-() only.
customer_service_email	optional	string(128)	Customer service email address of the merchant.

`required* = conditionally required`

ALIPAY REGISTER MERCHANT SITE INFO PARAMETERS

Site info

Request Parameters

Parameter	Required	Format	Description
type	required	string	Site type. For website URL, the value of this parameter must be WEB. For app download URL, the value of this parameter must be APP. Use uppercase.
url	required	string(256)	Site URL. When site_type is WEB, pass the URL in this format: http/https + SLD + TLD. When site_type is APP, pass the APP download URL starting with http/https.
name	optional	string(512)	Site name.

`required* = conditionally required`

Klarna

Introduction

Klarna Services provides the ability for merchants to release remaining authorization, resend invoice, update order items or to update order address of a transaction.

> Klarna services requests are handled exactly like transaction requests via XML and authentication is required. Note that Klarna services can be done via transaction_id

RELEASE REMAINING AUTHORIZATION API

The URL for Release Remaining Authorization API is:

Production:

`https://gate.e-comprocessing.net/klarna/release_remaining_authorization`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/klarna/release_remaining_authorization`

> Release Remaining Authorization service is used for approved Invoice transaction with at least one approved partial Invoice Capture transaction.
> With this call the remaining authorization amount will be released and Invoice Captures will be forbidden for the Invoice transaction.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/klarna/release_remaining_authorization \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <release_remaining_authorization_request>
   <transaction_id>a1qf12e81eb23d0e00ffb85b1db7d152</transaction_id>
 </release_remaining_authorization_request>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_id	required	string(255)	Unique transaction id defined by merchant

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<release_remaining_authorization_request>
  <status>success</status>
  <technical_message>Transaction operation successful!</technical_message>
</release_remaining_authorization_request>
```

Successful Response Parameters

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).

RESEND INVOICE API

The URL for Resend Invoice API is:

Production:

`https://gate.e-comprocessing.net/klarna/resend_invoice`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/klarna/resend_invoice`

> Resend Invoice service is used only for approved not yet refunded Invoice Capture transaction.
> With this call Klarna will resend the invoice of the captured transaction.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/klarna/resend_invoice \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <resend_invoice_request>
   <transaction_id>a1qf12e81eb23d0e00ffb85b1db7d152</transaction_id>
 </resend_invoice_request>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_id	required	string(255)	Unique transaction id defined by merchant

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<resend_invoice_request>
  <status>success</status>
  <technical_message>Transaction operation successful!</technical_message>
</resend_invoice_request>
```

Successful Response Parameters

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).

UPDATE ORDER ITEMS API

The URL for Update Order Items API is:

Production:

`https://gate.e-comprocessing.net/klarna/update_order_items`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/klarna/update_order_items`

> Update Order Items service is used only for approved but not yet captured Invoice transaction.
> With this call amount and associated items will be updated.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/klarna/update_order_items \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <update_order_items_request>
   <transaction_id>a1qf12e81eb23d0e00ffb85b1db7d152</transaction_id>
   <amount>10000</amount>
   <items>
     <item>
       <type>physical</type>
       <reference>19-402-BG1</reference>
       <name>BatteryPowerPack</name>
       <quantity>1</quantity>
       <unit_price>5000</unit_price>
       <tax_rate>0</tax_rate>
       <total_amount>5000</total_amount>
       <total_discount_amount>0</total_discount_amount>
       <total_tax_amount>0</total_tax_amount>
     </item>
   </items>
 </update_order_items_request>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_id	required	string(255)	Unique transaction id defined by merchant
amount	required	integer > 0	Amount of transaction in minor currency unit, seeCurrency and Amount Handling for details
items	required		List with items
item_type	required	string(255)	Order line type. Possible values: Supported item types
quantity	required	integer	Non-negative. The item quantity
unit_price	required	integer	Minor units. Includes tax, excludes discount(max value: 100000000)
total_amount	required	integer	Includes tax and discount. Must match (quantity unit price) - total discount amount divided by quantity (max value: 100000000)

Parameter	Required	Format	Description
reference	optional	string(255)	Article number, SKU or similar
name	optional	string(255)	Descriptive item name
tax_rate	optional	integer	Non-negative. In percent, two implicit decimals. I.e 2500 = 25.00 percent
total_discount_amount	optional	integer	Non-negative minor units. Includes tax
total_tax_amount	optional	integer	Must be within 1 of total amount - total_amount * 10000 / (10000 + tax rate). Negative when type is discount
image_url	optional	url	URL to an image that can be later embedded in communications between Klarna and the customer. (max 1024 characters)
product_url	optional	url	URL to an image that can be later embedded in communications between Klarna and the customer. (max 1024 characters)
quantity_unit	optional	string(8)	Unit used to describe the quantity, e.g. kg, pcs... If defined has to be 1-8 characters
product_identifiers	optional		List with product identifiers
brand	optional	string(255)	The product's brand name as generally recognized by consumers. If no brand is available for a product, do not supply any value
category_path	optional	string(255)	The product's category path as used in the merchant's webshop. Include the full and most detailed category and separate the segments with ' > '
global_trade_item_number	optional	string(255)	The product's Global Trade Item Number (GTIN). Common types of GTIN are EAN, ISBN or UPC. Exclude dashes and spaces, where possible
manufacturer_part_number	optional	string(255)	The product's Manufacturer Part Number (MPN), which - together with the brand - uniquely identifies a product. Only submit MPNs assigned by a manufacturer and use the most specific MPN possible
merchant_data	optional		List with merchant data
marketplace_seller_info	optional	string(255)	Information for merchant marketplace

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<update_order_items_request>
  <status>success</status>
  <technical_message>Transaction operation successful!</technical_message>
</update_order_items_request>
```

Successful Response Parameters

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).

UPDATE ORDER ADDRESS API

The URL for Update Order Address API is:

Production:

`https://gate.e-comprocessing.net/klarna/update_order_address`

Staging (for integration):

`https://staging.gate.e-comprocessing.net/klarna/update_order_address`

> Update Order Address service is used only for approved but not yet captured Klarna transaction.
> With this call billing and shipping addresses will be updated.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://staging.gate.e-comprocessing.net/klarna/update_order_address \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <update_order_address_request>
    <transaction_id>a1qf12e81eb23d0e00ffb85b1db7d152</transaction_id>
    <billing_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Berlin</city>
      <country>DE</country>
    </billing_address>
    <shipping_address>
      <first_name>Barney</first_name>
      <last_name>Rubble</last_name>
      <address1>14, Nerazdelni str</address1>
      <zip_code>1407</zip_code>
      <city>Berlin</city>
      <country>DE</country>
    </shipping_address>
  </update_order_address_request>'
```

Request Parameters

Parameter	Required	Format	Description
transaction_id	required	string(255)	Unique transaction id defined by merchant
billing_address	required		See Required vs Optional API params for details
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166
shipping_address	required		
first_name	required*	string(255)	Customer first name
last_name	required*	string(255)	Customer last name
address1	required*	string(255)	Primary address
address2	required*	string(255)	Secondary address
zip_code	required*	string	ZIP code
city	required*	string(255)	City
state	required*	string(2)	State code in ISO 3166-2, required for USA and Canada
country	required	string(2)	Country code in ISO 3166

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<update_order_address_request>
  <status>success</status>
  <technical_message>Transaction operation successful!</technical_message>
</update_order_address_request>
```

Successful Response Parameters

Parameter	Type	Description
status	string(255)	Status of the transaction, see states
technical_message	string(255)	Technical error message (for internal use only, not to be displayed to users).

Trustly Select Account

Introduction

Trustly Select Account call allows the consumer to select their Trustly account, which is later on used to complete a Trustly Bank Pay-out transaction.

A typical flow is:

The merchant makes an API call to SelectAccount and redirects the consumer to the url.

The consumer selects his/her bank and completes the identification process.

The consumer is redirected back to the merchant at the SuccessURL, note that the account might not be verified yet at this point.

When the account is verified, Trustly sends an account notification (Account_ID) to the merchant's system with information about the selected account and Account_id unique for each user's bank account.

> To interact with the Trustly Select Account API, you need to provide login credentials using standard HTTP Basic Authentication. Be sure to set Content-type: application/json in your headers. Replace terminal_id in the request with the desired terminal ID.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/trustly/select_account/:terminal_token \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "country": "UK",
   "first_name": "Travis",
   "last_name": "Pastrana",
   "ip_address": "255.255.255.255",
   "mobile_phone": "+441509813888",
   "national_id": "8910103344",
   "birth_date": "1989-10-10",
   "success_url": "https://example.com/success",
   "failure_url": "https://example.com/failure",
   "user_id": "12345678",
   "unique_id": "gp634ec5e7dbe6ca3871974accb875cd",
   "locale": "en_US"
 }'
```

Request Parameters

Parameter	Required	Format	Description
country	required	string(2)	Country code in ISO 3166
first_name	required	string(255)	Customer first name
ip_address	required	string(255)	IP address of the customer
email	required	e-mail address	Must contain valid e-mail of the customer

Parameter	Required	Format	Description
mobile_phone	required	string(32)	Must contain valid phone number of the customer
national_id	required	string(20)	National Identifier number of the customer
birth_date	required	yyyy-mm-dd	Must contain valid birth date of the customer
success_url	required	url	URL where the customer is sent to after successful authentication
failure_url	required	url	URL where the customer is sent to after failed authentication
user_id	required	string(255)	Unique user identifier defined by merchant in their own system. ID, username, hash or anything uniquely identifying the consumer requesting the deposit. Must be static per each consumer for any type of transaction where this consumer is involved (trustly_sale, bank pay_out, register_account, select account).
unique_id	required	string(255)	Unique identifier defined by merchant
locale	required	string(20)	Customer's localization preference in the format [language[_territory]]. Language is theISO 639 code and the territory ISO 3166 code.

`required* = conditionally required`

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
{
  "order_id": "4014321",
  "url": "http://example.com/customer_redirect"
}
```

Successful Response Parameters

Parameter	Type	Description
order_id	string(255)	Order identifier
url	url	URL where user has to be redirected to complete select account process.

Trustly Register Account

Introduction

Trustly Register Account call allows the merchant to verify customer's bank account details and get the associated account id which can be saved and used for future payouts.

To interact with the Trustly Register Account API, you need to provide login credentials using standard HTTP Basic Authentication. Be sure to set Content-type: application/json in your headers. Replace terminal_id in the request with the desired terminal ID.

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/trustly/register_account/:terminal_token \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "first_name": "Travis",
   "last_name": "Pastrana",
   "mobile_phone": "+441509813888",
   "national_id": "8910103344",
   "birth_date": "1989-10-10",
   "user_id": "12345678",
   "clearing_house": "SPAIN",
   "account_number": "ES8701820004756386447000",
   "bank_number": ""
 }'
```

List of supported clearinghouses:

AUSTRIA, BELGIUM, BULGARIA, CROATIA, CYPRUS, CZECH_REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY, GREECE, HUNGARY, IRELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, MALTA, NETHERLANDS, NORWAY, POLAND, PORTUGAL, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, SWEDEN, UNITED_KINGDOM

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
 {
   "account_id": "1044806532",
   "clearing_house": "SPAIN",
   "bank": "BBVA",
   "descriptor": "******************447000"
 }
```

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/trustly/register_account/:terminal_token \
  -X POST \
  -H "Content-Type: application/json" \
  -d '
 {
   "first_name": "Travis",
   "last_name": "Pastrana",
   "mobile_phone": "+441509813888",
   "national_id": "123456789",
   "birth_date": "1989-10-10",
   "user_id": "12345678",
   "clearing_house": "SWEDEN",
   "account_number": "8257466",
   "bank_number": "5839"
 }'
```

Request Parameters

Parameter	Required	Format	Description
first_name	required	string(255)	Customer first name
last_name	required	string(255)	Customer last name
email	optional	e-mail address	Must contain valid e-mail of the customer
mobile_phone	optional	string(32)	Must contain valid phone number of the customer
national_id	optional	string(20)	National Identifier number of the customer
birth_date	required	yyyy-mm-dd	Must contain valid birth date of the customer
user_id	required	string(255)	Unique user identifier defined by merchant in their own system. ID, username, hash or anything uniquely identifying the consumer requesting the deposit. Must be static per each consumer for any type of transaction where this consumer is involved (trustly_sale, bank pay_out, register_account, select account).

Parameter	Required	Format	Description
clearing_house	required	string(255)	The clearing house of the customer's bank account. Typically the name of a country in uppercase letters.
account_number	required	string(32)	The account number of the customer's bank account. Can be either IBAN or country-specific format.
bank_number	required	string(32)	The bank number of the customer's account in the given clearing house. For bank accounts in IBAN format, just provide an empty string ("")

`required* = conditionally required`

List of clearing houses with IBAN support: AUSTRIA, BELGIUM, BULGARIA, CROATIA, CYPRUS, CZECH_REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY, GREECE, HUNGARY, IRELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, MALTA, NETHERLANDS, NORWAY, POLAND, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, UNITED_KINGDOM

List of clearing houses with account number and bank number support: CZECH_REPUBLIC, DENMARK, ESTONIA, HUNGARY, NORWAY, PORTUGAL, SWEDEN, UNITED_KINGDOM

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
{
  "account_id": "7653385737",
  "clearing_house": "SWEDEN",
  "bank": "Skandiabanken",
  "descriptor": "*******4057"
}
```

Successful Response Parameters

Parameter	Type	Description
account_id	string(255)	Unique identifier associated with the account
clearing_house	string(255)	The clearing house of the account
bank	string(255)	Name of the bank for this account
descriptor	string(255)	A descriptor for this account

The account_id received in the response should be stored to process further payout requests.

TransferTo

Introduction

TransferTo API endpoint provides merchants with the ability to retrieve an up-to-date list of TransferTo Payers. Those are the institutions that provide the money to the consumers.

TransferTo Retrieve Payers request needs authentication.

RETRIEVE PAYERS API

This request is used to retrieve up-to-date TransferTo Payers list.

`GET /transfer_to_payers/payers`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/transfer_to_payers/payers \
  -X GET \
```

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
<?xml version="1.0" encoding="UTF-8"?>
<payers_response>
  <payers>
    <payer>
      <id>1</id>
      <name>Sample Payer 1</name>
      <currency>USD</currency>
      <country_iso_code>USA</country_iso_code>
      <service>BankAccount</service>
      <transfer_type>B2C</transfer_type>
      <transaction_requirements>{"sample":"requirements"}</transaction_requirements>
    </payer>
    <payer>
      <id>2</id>
      <name>Sample Payer 2</name>
      <currency>EUR</currency>
      <country_iso_code>FRA</country_iso_code>
      <service>MobileWallet</service>
      <transfer_type>B2C</transfer_type>
      <transaction_requirements>{"sample":"requirements"}</transaction_requirements>
    </payer>
  </payers>
</payers_response>
```

Successful Response Parameters

Parameter	Type	Description
payer		
id		
name		
currency		
country_iso_code		
service		
transfer_type		
transaction_requirements		

Errors

Error groups table

Code	Name	Description
(100..199)	Systems errors	Transaction could not be processed and was not passed to issuer.
(200..299)	Communication errors	Transaction could not be processed properly. Issuer could not be reached or returned invalid data. Errors 230 - 250 need to be reconciled as they might have been processed properly issuer-wise.
(300..399)	Input data errors	Transactions cannot be processed due to invalid incoming data in your request.
(400..499)	Workflow errors	Workflow errors will occur if you trigger a transaction that is not possible at this time in the workflow, e.g. a refund on a declined transaction.
(500..599)	Processing errors	These errors occur when a transaction was declined by the issuer.
(600..699)	Risk errors	Risk errors occur when any of the risk management systems will not let the transaction pass through.

Code	Name	Description
(700..799)	Tokenization errors	Tokenization related errors.
(800..899)	Genesis KYC Services errors	Genesis KYC Services errors
(900..999)	Issuer errors	Issuer errors occur when the issuer is unreachable or has other technical problems. If you experience this kind of errors, contact support.

Error codes tables

System Errors

Code	Name	Description
100	SystemError	A general system error occurred
101	MaintenanceError	System is undergoing maintenance, request could not be handled.
110	AuthenticationError	Login failed. Check your API credentials.
120	ConfigurationError	Configuration error occurred, e.g. terminal not config- ured properly. Check terminal settings.

Communication Errors

Code	Name	Description
200	CommunicationError	Communication with issuer failed, please contact sup- port.
210	ConnectionError	Connection to issuer could not be established, please contact support.
220	AccountError	Issuer account data invalid, please contact support.
230	TimeoutError	Issuer does not respond within given timeframe - please reconcile
240	ResponseError	Issuer returned invalid response - please reconcile and contact support
250	ParsingError	Issuer response could not be parsed - please reconcile and contact support.

Input Data Errors

Code	Name	Description
300	InputDataError	Invalid were data sent to the API.
310	InvalidTransactionTypeError	Invalid transaction type was passed to API. See transaction types.
320	InputDataMissingError	Required argument is missing. Check parameters.
330	InputDataFormatError	Argument passed in invalid format. Check parame- ters.
340	InputDataInvalidError	Argument passed in valid format but makes no sense (e.g. incorrect country code or currency). Check parameters.
350	InvalidXmlError	The input XML could not be parsed due to invalid code. Please check XML data.
360	InvalidContentTypeError	Missing or invalid content type: should be text/xml!

Workflow Errors

Code	Name	Description
400	WorkflowError	A transaction was triggered that is not possible at this time in the workflow, e.g. a refund on a declined transaction.
410	ReferenceNotFoundError	Reference transaction was not found.
420	ReferenceWorkflowError	Wrong Workflow specified.
430	ReferenceInvalidatedError	Reference transaction already invalidated!
440	ReferenceMismatchError	Data mismatch with reference, e.g. amount exceeds reference
450	DoubletTransactionError	Transaction doublet was detected, transaction was blocked. This happens if several transactions with same amount, cardholder, cc number, cvv and expiry date are sent within 5 minutes.
460	TransactionNotFoundError	The referenced transaction could not be found.
470	ChargebackNotFoundError	Chargeback not found!

Code	Name	Description
480	RetrievalRequestNotFoundError	Retrieval Request not found!
490	FraudReportNotFoundError	Fraud Report not found!

Processing Errors

Code	Name	Description
500	ProcessingError	Transaction declined by issuer
510	InvalidCardError	Transaction declined, Credit card number is invalid.
511	IssuerOctNotEnabledError	OCT not enabled error.
520	ExpiredCardError	Transaction declined, expiration date not in the future or date invalid.
530	TransactionPendingError	Transaction pending.
540	CreditExceededError	Amount excceds credit card limit.
550	IssuingError	The voucher could not be issued!
551	ScaRequiredError	SCA required!

Risk Errors

Code	Name	Description
600	RiskError	Transaction declined by risk management
601	InterchangeRejectError	Interchange reject received for transaction!
609	BinCountryCheckError	Card bin does not match billing country
610	CardBlacklistError	Card is blacklisted
611	BinBlacklistError	BIN blacklisted.
612	CountryBlacklistError	Country blacklisted.
613	IpBlacklistError	IP address blacklisted.
614	BlacklistError	value from payment transaction or risk params is blacklisted.
615	CardWhitelistError	PAN Whitelist Filter blocked the transaction. This filter - like the above one - uses the PAN blacklist (BL) to perform CC number checks against the BL in the DB. This filter however will reject transactions from a CC with a number which is not whitelisted.
620	CardLimitExceededError	Card limit exceeded configured limits.
621	TerminalLimitExceededError	Terminal limits exceeded.
622	ContractLimitExceededError	MID limits exceeded.
623	CardVelocityExceededError	Velocity by unknown card exceeded!
624	CardTicketSizeExceededError	Ticketsize by unknown card exceeded!
625	UserLimitExceededError	User limit exceeded configured limits.
626	MultipleFailureDetectionError	Found user transaction declined by issuer. Try again later!
627	CSDetectionError	The CrossSellingFilter blocks duplicated transactions when an approved transaction has been found on another mid. That is, if the transaction has already been processed successfully on a different mid and within the specified time frame, context entity / scope and possibly within the issuer scope (or not), it will be rejected in order to prevent duplicates.
628	RecurringLimitExceededError	Amount/count by recurring subscription exceeded.
629	IrisFilterDeclinedError	Transaction declined by risk management.
630	IrisFilterOnHoldError	Transaction on hold, a manual review will be done
690	AvsError	Address Verification failed.
691	MaxMindRiskError	If a transaction is considered high risk by MaxMind minFraud service, a MaxMindRiskError is raised.
692	ThreatMetrixRiskError	Transaction declined by ThreatMetrix risk module.
693	IpNotWhitelistedError	Transaction declined by risk management, IP is NOT whitelisted!
694	DomainBlacklistedError	Transaction declined by risk management, domain is blacklisted!
695	FraudError	Risk Error: Please contact the risk team!
696	IbanBlacklistError	Transaction declined by risk management, iban blacklisted!

Tokenization Errors

Code	Name	Description
701	ConsumerUniquenessError	Consumer with this consumer_id, email combination already exists!
702	InvalidConsumerError	Consumer not found!
703	DisabledConsumerError	Consumer is disabled!
700	TokenizationError	General tokenization error.
710	TokenizationNotEnabledError	Tokenization is not enabled for the merchant or the terminal! Contact support.
720	InvalidTokenTypeError	Unsupported token type!
730	InvalidTokenError	Invalid token!
740	DetokenizeForbiddenError	Detokenize action is forbidden!
741	TokenizeForbiddenError	Tokenize action is forbidden!
742	UpdateTokenForbiddenError	Update token action is forbidden!
743	ValidateTokenForbiddenError	Validate token action is forbidden!
744	DeleteTokenForbiddenError	Delete token action is forbidden!

Client-side encryption-related errors

750 | ClientSideEncryptionError | Client-side encryption error! 751 | ClientSideEncryptionNotEnabledError | Client-side Encryption is not enabled!

KYC Errors

Code	Name	Description
800	KycServiceError	General KYC Service Error
801	DocumentMimeTypeUnsupportedError	Uploaded document MIME type is not supported by KYC provider
802	InvalidRequestAttributesError	Passed attributes are invalid!
803	KycServiceNotConfiguredError	KYC Services not configured for Merchant!
804	KycServiceProviderError	KYC Service provider Error!
805	KycServiceNotificationError	Notification already received
806	KycServiceUnacceptableMerchantStateError	Merchant state does not allow using KYC Service API!

Remote Errors

Code	Name	Description
900	RemoteError	Some error occurred on the issuer. Contact support.
910	RemoteSystemError	Some error occurred on the issuer
920	RemoteConfigurationError	Issuer configuration error
930	RemoteDataError	Some passed data caused an error on the issuer
940	RemoteWorkflowError	Remote workflow error
950	RemoteTimeoutError	Issuer has timeouted with clearing network

Description can be slightly different for error messages per acquirer, but the error classes will be as documented.

Client Integrations

There are client libraries and examples for a few programming languages to ease the merchant integration effort:

Language	Github	Description
.NET	Genesis .NET	.NET client library
Java	Genesis Java	Java client library

Language	Github	Description
Java	Genesis Android	Android client library
Node.js	Genesis Node	Node.js client library
PHP	Genesis PHP	PHP client library
Swift	Genesis Swift	iOS client library

Should you have any questions or suggestions regarding the client libraries and improvements, contact the IT Support team at tech-support@e-comprocessing.com.

You can also fork the repo(s) and send us pull requests directly at our Github account.

Client-side encryption

The *Client-side Encryption* (CSE) allows merchants to accept payments on their website while encrypting card data in their customer's browser with our JavaScript encryption library.

> The CSE must be used in combination with one of our classic Client Integrations.

To help merchants encrypt all sensitive card data on the customer's side, E-ComProcessing hosts the JavaScript library and merchant's encryption key. In addition, the merchants can decide to host the library by themselves, but we strongly recommend the Client-side encryption library hosted by our services to be used.

If the merchants want to use the Client-Side Encryption (CSE) library, it needs to contact tech-support@e-comprocessing.com in order to enable this feature for them. Then the merchant will be allowed to obtain the public key and the library in the merchant web console.

Client side

```
<head>
  ...
  <script src="https://{CDN}/encrypto-{VERSION}.js"
          integrity="sha512-lJxHl93A/b8peqxz/mdLj7jD58N2zvHiiYhw8...=="
          crossorigin="anonymous"></script>
</head>

<body>
  <form method="POST" action="/request-payment" id="encrypto-form">
    <div>
      <input type="text" data-encrypted-name="card_number"/>
      <input type="text" data-encrypted-name="card_holder"/>
      ...
      <input type="text" data-encrypted-name="cvv"/>
      ...
      <input type="text" name="country"/>
      <input type="text" name="city"/>
    </div>
    ...
    <input type="submit" value="Pay"/>
  </form>

  <script>
    var publicKey = '...';

    Encrypto.createEncryptedForm(publicKey, {   // Required
      // formId: 'encrypto-form',               // Optional
      // onSubmit: function(form) {             // Optional
      //   console.log(form.fields);
      // }
    })
  </script>
</body>
```

First, the merchant needs to create a payment form integrated with the Client-Side Encryption (CSE) library which can be retrieved from the **Client Side Encryption** panel in the merchant console at the merchant configuration page.

Make sure that payment form contains all required fields for the transaction type which it's going to be used. Consult with our Transactions documentation. Don't forget to replace the form action with the payment handler URL of the merchant's server.

Flag all card input fields for encryption by annotating them with the `data-encrypted-name` attribute. The name attribute should not be used for card input fields. The fields allowed for encryption are `card_holder`, `card_number`, `expiration_month`, `expiration_year`, and `cvv`.

> Use "data-encrypted-name" attribute for card input fields. This technique protects the merchant's server from receiving unencrypted card data and avoids any impact on the transaction security and PCI regulations compliance.

Eventually, the form may have a custom ID attribute. The `formId` option can be used to set any string as an ID for the payment form. Make sure to update the HTML form with the configured option. They both must match.

Options

option	type	description
formId	string	Use to set custom form ID. Default value `encrypto-form`
onSubmit	function	Use to set custom on submit callback

PREVENT FORM SUBMIT ACTION

```
Encrypto.createEncryptedForm(publicKey, {
  onSubmit: function(form) {
    // console.log(form.fields);
  }
})
```

In the case of a single-page application or a form that uses AJAX, maybe it's not desirable the form to reload the page when the payment gets submitted. For that reason, we provide `onSubmit` option. This option gives access to all the form data(including the encrypted fields) and allows to submit it via any AJAX library.

JAVASCRIPT ONLY

```
<head>
  ...
  <script src="https://{CDN}/encrypto-{VERSION}.js"
          integrity="sha512-lJxHl93A/b8peqxz/mdLj7jD58N2zvHiiYhw8...=="
          crossorigin="anonymous"></script>
</head>

<body>
  <script>
    var publicKey = '...';
    var cse = Encrypto.createEncryption(publicKey);

    let data = {
      cvv: '123',
      card_number: '42000...'
    };

    var encryptedData = cse.encrypt(data);
  </script>
</body>
```

In case the merchant does not have an HTML form, our library provides HTML-independent encryption. In this scenario, it's important to remember it's the merchant responsibility to make sure the card data is encrypted before sending it to the server.

> Always encrypt the card data before sending to the merchant's server.

The JavaScript-only option can be convenient in case of a more complex single-page application which relays on state management library before sending any data to the server.

Server side

From the merchant's server, an HTTP POST request needs to be made to the gateway API endpoints. The workflow is the same as in the classic Client Integrations. The only difference when the Client-Side Encryption (CSE) library is used is that our gateway will receive the card data encrypted.

> There is no need to change anything in the merchant's server if it's already using any of the Client Integrations.

Do not worry about the decryption. Our gateway will handle the API request as a standard transaction. Make sure to always use the correct public key in the client-side code.

Shopping Carts

Genesis has a number of shopping cart plugins to ease the merchant integration effort:

Shopping cart	Github	Marketplace	Description
Magento 1.x CE	Magento CE		Shopping cart plugin for Magento 1.x CE
Magento 2.x CE	Magento 2.x CE		Shopping cart plugin for Magento 2.x CE
OpenCart	OpenCart	OpenCart Extensions	Shopping cart plugin for OpenCart
osCommerce	osCommerce	osCommerce Add-Ons	Shopping cart plugin for osCommerce
PrestaShop	PrestaShop		Shopping cart plugin for PrestaShop

Shopping cart	Github	Marketplace	Description
Shopify	Internal integration	Internal integration	Shopping cart Integration for Shopify
WooCommerce	WooCommerce		Shopping cart plugin for WooCommerce
X-Cart	X-Cart		Shopping cart plugin for X-Cart
Zen Cart	Zen Cart	Zen Cart Plugins	Shopping cart plugin for Zen Cart

Should you have any questions or suggestions regarding the shopping cart plugins and improvements, contact the IT Support team at tech-support@e-comprocessing.com.

You can also fork the repo(s) and send us pull requests directly at our Github account.

Testing

For testing first login to the gateway admin and create a terminal.

The url for test admin is:

`https://staging.merchant.e-comprocessing.net/`

The api base url for test processing is:

`https://staging.gate.e-comprocessing.net/process/TERMINAL_TOKEN`

The api base url for test single transaction reconciling is:

`https://staging.gate.e-comprocessing.net/reconcile/TERMINAL_TOKEN`

The api base url for test date range reconciling is:

`https://staging.gate.e-comprocessing.net/reconcile/by_date/TERMINAL_TOKEN`

For testing the gateway the following credit card numbers can be used:

card number	card brand	transaction result
4200000000000000	Visa	successful transaction
4111111111111111	Visa	transaction declined
5555555555554444	Master Card	successful transaction
5105105105105100	Master Card	transaction declined

For 3DSecure testing the following credit card numbers can be used:

3DS v1

For more specifics and flows regarding the 3DSv1 authentication protocol, go to 3DSv1 section.

Test Cards The following test cards can be used to return specific responses in each state

Card Number	Card Brand	Transaction Result
4711100000000000	Visa	3DSecure enrolled
4012001037461114	Visa	3DSecure enrolled failing authentication
4012001036853337	Visa	3DSecure unavailable - Card Not Participating
4012001037484447	Visa	Error in 3DSecure Network in first step of 3DSecure authentication process
4012001036273338	Visa	Error in 3DSecure Network in second (asynchronous) step of 3DSecure authentication process
5555555555559997	MasterCard	3DSecure enrolled
5185540810000019	MasterCard	3DSecure enrolled failing authentication
5454545454545454	MasterCard	3DSecure unavailable - Card Not Participating
5200828282828210	MasterCard	Error in 3DSecure Network in first step of 3DSecure authentication process
5204230080000017	MasterCard	Error in 3DSecure Network in second (asynchronous) step of 3DSecure authentication process

When redirected to the dummy authentication page you may enter any password you like.

3DS v2

For more specifics and flows regarding the 3DSv2 authentication protocol, go to3DSv2 section.

Scenario	3DSecure Method	3DSecure Challenge	Fallback to 3DSv1	Result	Card Number	Note
Frictionless	-	-	-	Authenticated	4012000000060085	
Frictionless	Y	-	-	Authenticated	4066330000000004	
Low risk exemption accepted	-	-	-	Authenticated	5169750000001111	Used only for synchronous 3DS workflow.
Frictionless	-	-	-	Not authenticated	4111110000000922	
Frictionless	Y	-	-	Not authenticated	4111112232423922	
Challenge	-	Y	-	Choose Challenge result	4918190000000002	
Challenge	Y	Y	-	Choose Challenge result	4938730000000001	
Fallback to 3DSv1	-	-	Y	Choose PaRes response	4901170000000003	
Fallback to 3DSv1	Y	-	Y	Choose PaRes response	4901164281364345	

In test mode, successful transaction XML responses will include the following error message: ”TESTMODE: No real money will be transferred!”

AVS

The following amounts can be used to return specific avs response code and avs response description:

Code	Amount	BIN Country	Response Description
A	1.00	UK, US	Address matches - ZIP Code does not match
B	1.01	UK, US	Street address match, Postal code in wrong format (international issuer)
C	1.02	UK, US	Street address and postal code in wrong formats
D	1.03	UK, US	Street address and postal code match (international issuer)
F	1.04	UK	Address does compare and five-digit ZIP code does compare (UK only)
G	1.05	UK, US	Service not supported by non-US issuer
I	1.06	UK, US	Address information not verified by international issuer
M	1.07	UK, US	Street Address and Postal code match (international issuer)
N	1.08	UK, US	No Match on Address (Street) or ZIP
P	1.09	UK, US	Postal codes match, Street address not verified due to incompatible formats
R	1.10	UK, US	Retry, System unavailable or Timed out
S	1.11	UK, US	Service not supported by issuer
U	1.12	UK, US	Address information is unavailable
W	1.13	US	9-digit ZIP matches, Address (Street) does not match
X	1.14	US	Exact AVS Match
Y	1.15	US	Address (Street) and 5-digit ZIP match
Z	1.16	US	5-digit ZIP matches, Address (Street) does not match

Visa, Maestro and Mastercard card brands can be used for all avs response codes except for 1.14, which only works with Maestro and Mastercard.

The AVS response does not depend on the status of the transaction.

Status Page

statuspage.io is a popular service allowing to track server status, infrastructure notifications, and others.

Note that you can sign up forE-ComProcessing's status page.

It allows to sign up via email or SMS or both, and receive notifications for our payment services and any planned maintenance windows, upgrades, or similar in the future should the need arise.

Infrastructure and Uptime

Genesis is hosted in two data centers respectively in Berlin and Amsterdam, and features a state-of-the-art, active-active infrastructure setup. As such, it employs load balancing and failover on the DNS layer, and you should be using and requesting the API nodes and web apps only via their dedicated DNS names.

No hard-coding of IP addresses should be performed on the customers' systems, as this will prevent the customer to take advantage of the failover in case one of the data centers has issues or throughout maintenance windows and current processing happens through one data center only, however rare this might be. In addition, load balancing of the customers' volume is also impacted if IP addresses are hardcoded.

Finally, note that the DNS load balancing and failover layer has a TTL of 30 seconds, and will sense any issues returning the right IP addresses to use, for both API nodes and web apps alike, at all times.

As a highly available payment gateway platform, Genesis strives to achieve an uptime SLA of 99.99 percent on a yearly basis.

Penetration Testing Warning

It is important that merchants read and understand the activities that are explicitly prohibited when using the payment gateway services.

While merchants are encouraged to perform best practice security testing on their own websites and applications, merchants must ensure under all circumstances that scans exclude the payment gateway Web Payment Form (WPF), Processing API, and merchant console.

Action	prohibited?
Penetration testing of any gateway services	Prohibited
Load testing	Prohibited. During integration testing, ensure minimum number of requests
Exploiting common security vulnerabilities	Prohibited
Injecting malicious data	Prohibited
Bypassing validation and security checks	Prohibited
Subverting ACLs and user permissions	Prohibited
Port scanning and service discovery	Prohibited
Usage of ping/traceroute	Acceptable for short term debugging purposes

Note that merchants that do not abide by the above policy will be immediately blacklisted, resulting in terminating access to the WPF, Processing API, and merchant console.

AVS Status Codes

When sending a transaction for address verification or card verification, one of the following responses from the issuing bank will be received.

Code	Summary	VISA	MasterCard
A	Partial Match	Address matches, ZIP does not.	Address matches, ZIP does not.
B	Partial Match (International Transaction)	Street address match. Postal code not verified because of incompatible formats. (Acquirer sent both street address and postal code)	Street addresses match. Postal code not verified due to incompatible formats. (Acquirer sent both street address and postal code.)
C	No Match (International Transaction)	Street address and postal code not verified because of incompatible formats. (Acquirer sent both street address and postal code.)	Street address and postal code not verified due to incompatible formats. (Acquirer sent both street address and postal code.)
D	Full Match (International Transaction)	Street addresses and postal code match.	Street addresses and postal codes match.

Code	Summary	VISA	MasterCard
F	Full Match (UK only)	Street address and postal code match. Applies to U.K. only.	Street address and postal code match. Applies to U.K. only.
G	Not Supported (International Transaction)	Address information not verified for international transaction.	Address information not verified for international transaction.
I	No Match (International Transaction)	Address information not verified.	Address information not verified.
M	Full Match (International Transaction)	Street addresses and postal code match.	Street address and postal code match.
N	No Match	Neither address nor postal code matches.	Neither address nor postal code matches.
P	Partial Match (International Transaction)	Postal codes match. Street address not verified because of incompatible formats. (Acquirer sent both street address and postal code.)	Postal code match. Street address not verified because of incompatible formats. (Acquirer sent both street address and postal code.)
R	System Unavailable	Retry, system unable to process.	Retry, system unable to process.
S	Not Supported	AVS currently not supported.	AVS currently not supported.
U	System Unavailable	No data from issuer/Authorization System. Information not available.	No data from issuer/Authorization System. Information not available.
W	Partial Match (US only)	Not applicable. If present, replaced with "Z" by V.I.R Available for U.S. issuers only.	For U.S. addresses, nine-digit postal code matches, address does not; for address outside the U.S., postal code matches, address does not.
X	Full Match	Not applicable.	For U.S. addresses, nine-digit postal code and address matches; for addresses outside the U.S., postal code and address match.
Y	Full Match	For U.S. addresses, five-digit or nine-digit postal code and address matches.	For U.S. addresses, five-digit postal code and address matches.
Z	Partial Match	For U.S. addresses, five-digit or nine-digit postal code matches, address does not.	For U.S. addresses, five-digit postal code matches, address does not.

AVS status codes are valid for cards issued from United States and United Kingdom. For other countries status message will be returned with error description.

CVV Result Codes

Code	Summary
M	Match
N	No match
S	Should be on card
P	Not processed
U	Issuer does not participate

Level 3 Travel Data

Level 3 travel data is supplied as optional data to the standard API request. If the supplied is valid travel data then the transaction will be processed as a travel transaction and will qualify for the travel Incentive rates. Otherwise the transaction will be processed normally as a regular transaction. Note that the travel data will be stored as part of the transaction in all cases.

Travel data is supported for Authorize, Authorize3D, Capture, Sale, Sale3D, InitRecurringSale, InitRecurringSale3D, RecurringSale.

The following travel types are supported Airline Itinerary Data (AID), Car Rental, Hotel Rental, Ancillary Charges, Misc Charges.

Check the travel related transaction special cases.

Travel Types

AIRLINE ITINERARY DATA (AID)

Airline Ticket transaction With Airline Itinerary Data (AID)

MasterCard

Contract Merchant Category Code must be 3000-3350, 4511, 4722, 4723 or 5962

Master Card

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"ticket"=>{"ticket_number"=>123456789012345, "passenger_name"=>"Test Example", "customer_code"=>1, "issuing_carrier"=>"AAAA", "total_fare"=>5000, "agency_name"=>"Agency", "agency_code"=>"

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"ticket"=>{"ticket_number"=>123456789012345, "passenger_name"=>"Test Example", "customer_code"=>1, "issuing_carrier"=>"AAAA", "total_fare"=>5000, "agency_name"=>"Agency", "agency_code"=

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "ticket": {
        "ticket_number": 123456789012345,
        "passenger_name": "Test Example",
        "customer_code": 1,
        "issuing_carrier": "AAAA",
        "total_fare": 5000,
        "agency_name": "Agency",
        "agency_code": "AG001"
      },
      "legs": [
        {
          "departure_date": "2018-02-05",
          "carrier_code": 12,
          "service_class": 1,
          "origin_city": "VAR",
          "destination_city": "FRA",
          "stopover_code": 0,
          "fare_basis_code": 1,
          "flight_number": "W6666",
          "departure_time": "11:37",
          "departure_time_segment": "A"
        }
      ]
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```xml
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <.../>
    <travel>
      <ticket>
        <ticket_number>123456789012345</ticket_number>
        <passenger_name>Test Example</passenger_name>
        <customer_code>1</customer_code>
        <issuing_carrier>AAAA</issuing_carrier>
        <total_fare>5000</total_fare>
        <agency_name>Agency</agency_name>
        <agency_code>AG001</agency_code>
      </ticket>
      <legs>
        <leg>
          <departure_date>2018-02-05</departure_date>
          <carrier_code>12</carrier_code>
          <service_class>1</service_class>
          <origin_city>VAR</origin_city>
          <destination_city>FRA</destination_city>
          <stopover_code>0</stopover_code>
          <fare_basis_code>1</fare_basis_code>
          <flight_number>W6666</flight_number>
          <departure_time>11:37</departure_time>
          <departure_time_segment>A</departure_time_segment>
        </leg>
      </legs>
    </travel>
  </payment_transaction>'
```

Master Card Multiple Legs

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"ticket"=>{"ticket_number"=>123456789012345, "passenger_name"=>"Test Example", "customer_code"=>1, "issuing_carrier"=>"AAAA", "total_fare"=>5000, "agency_name"=>"Agency", "agency_code"=>"

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"ticket"=>{"ticket_number"=>123456789012345, "passenger_name"=>"Test Example", "customer_code"=>1, "issuing_carrier"=>"AAAA", "total_fare"=>5000, "agency_name"=>"Agency", "agency_code"=

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "ticket": {
        "ticket_number": 123456789012345,
        "passenger_name": "Test Example",
        "customer_code": 1,
        "issuing_carrier": "AAAA",
        "total_fare": 5000,
        "agency_name": "Agency",
        "agency_code": "AG001"
      },
      "legs": [
        {
          "departure_date": "2018-02-05",
          "carrier_code": 12,
          "service_class": 1,
          "origin_city": "VAR",
          "destination_city": "FRA",
          "stopover_code": 0,
          "fare_basis_code": 1,
          "flight_number": "W6666",
          "departure_time": "11:37",
          "departure_time_segment": "A"
        },
        {
          "departure_date": "2018-02-05",
          "carrier_code": 12,
          "service_class": 1,
          "origin_city": "VAR",
          "destination_city": "BER",
          "stopover_code": 0,
          "fare_basis_code": 1,
          "flight_number": "W6666",
          "departure_time": "11:37",
          "departure_time_segment": "A"
        }
      ]
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <.../>
   <travel>
     <ticket>
       <ticket_number>123456789012345</ticket_number>
       <passenger_name>Test Example</passenger_name>
       <customer_code>1</customer_code>
       <issuing_carrier>AAAA</issuing_carrier>
       <total_fare>5000</total_fare>
       <agency_name>Agency</agency_name>
       <agency_code>AG001</agency_code>
     </ticket>
     <legs>
       <leg>
         <departure_date>2018-02-05</departure_date>
         <carrier_code>12</carrier_code>
         <service_class>1</service_class>
         <origin_city>VAR</origin_city>
         <destination_city>FRA</destination_city>
         <stopover_code>0</stopover_code>
         <fare_basis_code>1</fare_basis_code>
         <flight_number>W6666</flight_number>
         <departure_time>11:37</departure_time>
         <departure_time_segment>A</departure_time_segment>
       </leg>
       <leg>
         <departure_date>2018-02-05</departure_date>
         <carrier_code>12</carrier_code>
         <service_class>1</service_class>
         <origin_city>VAR</origin_city>
         <destination_city>BER</destination_city>
         <stopover_code>0</stopover_code>
         <fare_basis_code>1</fare_basis_code>
         <flight_number>W6666</flight_number>
         <departure_time>11:37</departure_time>
         <departure_time_segment>A</departure_time_segment>
       </leg>
     </legs>
   </travel>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	required		
ticket	required*		
ticket_number	required*	String(15)	The number on the ticket.
passenger_name	required*	String(29)	The name of the passenger. May be the cardholder name if the passenger name is unavailable. Must not be blank.
customer_code	required*	String(17)	The customer code. Internal Reference.
issuing_carrier	optional	String(4)	Contains the standard abbreviation for the airline or railway carrier issuing the ticket.
total_fare	required*	Integer	Total amount of the ticket and should equal the amount of the transaction.
agency_name	optional	String(30)	An entry should be supplied if a travel agency issued the ticket.
agency_code	optional	String(8)	An entry should be supplied if a travel agency issued the ticket.
confirmation_information	required*	String(474)	Confirmation Information
date_of_issue	required*	String(10)	Date Of Issue
legs	required*		Max legs 10
leg	required*		
departure_date	required	String(10)	The departure date. Date can be in future.
arrival_date	required*	String(10)	The arrival date. Date can be in future.
carrier_code	required*	String(2)	Contains the standard abbreviation for the airline or railway carrier issuing the ticket. This should not contain all spaces or zeros. Code indicating name of carrier.
service_class	required*	String(1)	The service type. i.e. Coach, First Class. Required for reduced interchange.
origin_city	required*	String(3)	The originating airport name‘s standard abbreviation. This should not contain all spaces or zeroes.
destination_city	required*	String(3)	The destination airport or railway name‘s standard abbreviation.
stopover_code	required*	String(1)	A code indicating whether there was a direct or a non-direct flight or route on the same ticket number. Allowed values: 0, 1

Parameter	Required	Format	Description
fare_basis_code	optional	String(6)	A code that carriers assign to a particular ticket type, such as business class or discounted/ non-re fundable.
flight_number	optional	String(5)	The number that the operating or marketing carrier assigned.
departure_time	optional	String(5)	The time of departure provided by the airline or railway, per trip leg.
departure_time_segment	optional	String(1)	Departure Time Segment. Allowed values: A, P
taxes	optional		Max taxes 10
tax	optional		
fee_amount	required*	Integer	Fee Amount
fee_type	required*	String(8)	Fee Type

`required* = conditionally required`

Visa

Contract Merchant Category Code must be 3000-3350, 4511, 4722, 4723 or 5962

Visa

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"ticket"=>{"ticket_number"=>12345, "passenger_name"=>"Emil Example", "customer_code"=>1, "restricted_ticket_indicator"=>1, "agency_name"=>"Agency", "agency_code"=>"AG001", "confirmation_i

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"ticket"=>{"ticket_number"=>12345, "passenger_name"=>"Emil Example", "customer_code"=>1, "restricted_ticket_indicator"=>1, "agency_name"=>"Agency", "agency_code"=>"AG001", "confirmatio

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "ticket": {
        "ticket_number": 12345,
        "passenger_name": "Emil Example",
        "customer_code": 1,
        "restricted_ticket_indicator": 1,
        "agency_name": "Agency",
        "agency_code": "AG001",
        "confirmation_information": "Confirmation",
        "date_of_issue": "2018-02-01"
      },
      "legs": [
        {
          "departure_date": "2018-02-01",
          "carrier_code": 2,
          "service_class": 3,
          "origin_city": "SOF",
          "destination_city": "VAR",
          "stopover_code": 0,
          "fare_basis_code": 1,
          "flight_number": "W6666"
        }
      ],
      "taxes": [
        {
          "fee_amount": 1000,
          "fee_type": "Airport tax"
        }
      ]
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <.../>
    <travel>
      <ticket>
        <ticket_number>12345</ticket_number>
        <passenger_name>Emil Example</passenger_name>
        <customer_code>1</customer_code>
        <restricted_ticket_indicator>1</restricted_ticket_indicator>
        <agency_name>Agency</agency_name>
        <agency_code>AG001</agency_code>
        <confirmation_information>Confirmation</confirmation_information>
        <date_of_issue>2018-02-01</date_of_issue>
      </ticket>
      <legs>
        <leg>
          <departure_date>2018-02-01</departure_date>
          <carrier_code>2</carrier_code>
          <service_class>3</service_class>
          <origin_city>SOF</origin_city>
          <destination_city>VAR</destination_city>
          <stopover_code>0</stopover_code>
          <fare_basis_code>1</fare_basis_code>
          <flight_number>W6666</flight_number>
        </leg>
      </legs>
      <taxes>
        <taxe>
          <fee_amount>1000</fee_amount>
          <fee_type>Airport tax</fee_type>
        </taxe>
      </taxes>
    </travel>
  </payment_transaction>'
```

Visa Multiple Legs

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"ticket"=>{"ticket_number"=>123456789012345, "passenger_name"=>"Test Example", "customer_code"=>1, "restricted_ticket_indicator"=>1, "agency_name"=>"Agency", "agency_code"=>"AG001"}, "leg

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"ticket"=>{"ticket_number"=>123456789012345, "passenger_name"=>"Test Example", "customer_code"=>1, "restricted_ticket_indicator"=>1, "agency_name"=>"Agency", "agency_code"=>"AG001"}, "

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "ticket": {
        "ticket_number": 123456789012345,
        "passenger_name": "Test Example",
        "customer_code": 1,
        "restricted_ticket_indicator": 1,
        "agency_name": "Agency",
        "agency_code": "AG001"
      },
      "legs": [
        {
          "departure_date": "2018-02-01",
          "carrier_code": 2,
          "service_class": 3,
          "origin_city": "SOF",
          "destination_city": "VAR",
          "stopover_code": 0,
          "fare_basis_code": 1,
          "flight_number": "W6666"
        },
        {
          "departure_date": "2018-02-01",
          "carrier_code": 2,
          "service_class": 3,
          "origin_city": "VAR",
          "destination_city": "FRA",
          "stopover_code": 0,
          "fare_basis_code": 1,
          "flight_number": "W6366"
        }
      ]
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <.../>
    <travel>
      <ticket>
        <ticket_number>123456789012345</ticket_number>
        <passenger_name>Test Example</passenger_name>
        <customer_code>1</customer_code>
        <restricted_ticket_indicator>1</restricted_ticket_indicator>
        <agency_name>Agency</agency_name>
        <agency_code>AG001</agency_code>
      </ticket>
      <legs>
        <leg>
          <departure_date>2018-02-01</departure_date>
          <carrier_code>2</carrier_code>
          <service_class>3</service_class>
          <origin_city>SOF</origin_city>
          <destination_city>VAR</destination_city>
          <stopover_code>0</stopover_code>
          <fare_basis_code>1</fare_basis_code>
          <flight_number>W6666</flight_number>
        </leg>
        <leg>
          <departure_date>2018-02-01</departure_date>
          <carrier_code>2</carrier_code>
          <service_class>3</service_class>
          <origin_city>VAR</origin_city>
          <destination_city>FRA</destination_city>
          <stopover_code>0</stopover_code>
          <fare_basis_code>1</fare_basis_code>
          <flight_number>W6366</flight_number>
        </leg>
      </legs>
    </travel>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	required		
ticket	required*		
ticket_number	required*	String(15)	The number on the ticket.
passenger_name	required*	String(29)	The name of the passenger. May be the cardholder name if the passenger name is unavailable. Must not be blank.
customer_code	required*	String(17)	The customer code. Internal Reference.
confirmation_information	required*	String(474)	Confirmation Information
date_of_issue	required*	String(10)	Date Of Issue
restricted_ticket_indicator	optional	String(1)	Space or 0 = No restriction, 1 = Restriction; Allowed values: Empty String, 0, 1
agency_name	optional	String(30)	An entry should be supplied if a travel agency issued the ticket.
agency_code	optional	String(8)	An entry should be supplied if a travel agency issued the ticket.
legs	required*		Max legs 10
leg	required*		
departure_date	required	String(10)	The departure date. Date can be in future.
arrival_date	required*	String(10)	The arrival date. Date can be in future.
origin_city	required*	String(3)	The originating airport name‘s standard abbreviation. This should not contain all spaces or zeroes.
carrier_code	required*	String(2)	Contains the standard abbreviation for the airline or railway carrier issuing the ticket. This should not contain all spaces or zeros. Code indicating name of carrier.
service_class	required*	String(1)	The service type. i.e. Coach, First Class. Required for reduced interchange.
stopover_code	required*	String(1)	A code indicating whether there was a direct or a non-direct flight or route on the same ticket number. Allowed values: 0, 1
destination_city	required*	String(3)	The destination airport or railway name‘s standard abbreviation.
fare_basis_code	optional	String(6)	A code that carriers assign to a particular ticket type, such as business class or discounted/ non-re fundable.
flight_number	optional	String(5)	The number that the operating or marketing carrier assigned.
taxes	optional		Max taxes 10
tax	optional		
fee_amount	required*	Integer	Fee Amount
fee_type	required*	String(8)	Fee Type

`required* = conditionally required`

CAR RENTAL

MasterCard

Contract Merchant Category Code must be 3351-3500, 4722, 4723, 5962, 7512, 7513, 7519

Master Card

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"rentals"=>{"car_rental"=>{"purchase_identifier"=>12478, "class_id"=>3, "pickup_date"=>"2018-02-05", "renter_name"=>"Emil Example", "return_city"=>"Varna", "return_state"=>"VAR", "return_

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"rentals"=>{"car_rental"=>{"purchase_identifier"=>12478, "class_id"=>3, "pickup_date"=>"2018-02-05", "renter_name"=>"Emil Example", "return_city"=>"Varna", "return_state"=>"VAR", "retu

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "rentals": {
        "car_rental": {
          "purchase_identifier": 12478,
          "class_id": 3,
          "pickup_date": "2018-02-05",
          "renter_name": "Emil Example",
          "return_city": "Varna",
          "return_state": "VAR",
          "return_country": "BGR",
          "return_date": "2018-02-06",
          "renter_return_location_id": 12478,
          "customer_code": 1
        }
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
 <?xml version="1.0" encoding="UTF-8"?>
 <payment_transaction>
   <.../>
   <travel>
     <rentals>
       <car_rental>
         <purchase_identifier>12478</purchase_identifier>
         <class_id>3</class_id>
         <pickup_date>2018-02-05</pickup_date>
         <renter_name>Emil Example</renter_name>
         <return_city>Varna</return_city>
         <return_state>VAR</return_state>
         <return_country>BGR</return_country>
         <return_date>2018-02-06</return_date>
         <renter_return_location_id>12478</renter_return_location_id>
         <customer_code>1</customer_code>
       </car_rental>
     </rentals>
   </travel>
 </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	required		
rentals	required		
car_rental	required		
purchase_identifier	required*	String(9)	Rental Agreement Number / Hotel Folio Number.
class_id	required*	String(4)	The car rental classification. Allowed values: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 9999
pickup_date	required	String(10)	Car rental Pick-up date.
renter_name	required*	String(20)	The Renter Name
return_city	required*	String(18)	The Rental Return City
return_state	required*	String(3)	The Rental Return State
return_country	required*	String(3)	The Rental Return Country
return_date	required	String(10)	Car Rental return date
renter_return_location_id	required*	String(10)	Expenses or Car Rental code, Address, phone number, etc. Identifying Rental Return Location.
customer_code	required*	String(17)	The customer code. Internal Reference.

`required* = conditionally required`

Visa

Contract Merchant Category Code must be 3351-3500, 4722, 4723, 5962, 7512, 7513, 7519

Visa

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"rentals"=>{"car_rental"=>{"purchase_identifier"=>12478, "class_id"=>3, "pickup_date"=>"2018-02-05", "renter_name"=>"Emil Example", "return_city"=>"Varna", "return_state"=>"VAR", "return_

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"rentals"=>{"car_rental"=>{"purchase_identifier"=>12478, "class_id"=>3, "pickup_date"=>"2018-02-05", "renter_name"=>"Emil Example", "return_city"=>"Varna", "return_state"=>"VAR", "retu

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "rentals": {
        "car_rental": {
          "purchase_identifier": 12478,
          "class_id": 3,
          "pickup_date": "2018-02-05",
          "renter_name": "Emil Example",
          "return_city": "Varna",
          "return_state": "VAR",
          "return_country": "BGR",
          "return_date": "2018-02-06",
          "renter_return_location_id": 12478,
          "customer_code": 1
        }
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <.../>
    <travel>
      <rentals>
        <car_rental>
          <purchase_identifier>12478</purchase_identifier>
          <class_id>3</class_id>
          <pickup_date>2018-02-05</pickup_date>
          <renter_name>Emil Example</renter_name>
          <return_city>Varna</return_city>
          <return_state>VAR</return_state>
          <return_country>BGR</return_country>
          <return_date>2018-02-06</return_date>
          <renter_return_location_id>12478</renter_return_location_id>
          <customer_code>1</customer_code>
        </car_rental>
      </rentals>
    </travel>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	required		
rentals	required		
car_rental	required		
purchase_identifier	optional	String(25)	Rental Agreement Number / Hotel Folio Number
pickup_date	required*	String(10)	Car rental Pick-up date.
return_date	required*	String(10)	Car rental Return date.
extra_charges	optional	Array(6)	Additional charges added to customer bill after check-out. Each position can be used to indicate a type of charge; Allowed values: 1, 2, 3, 4, 5
no_show_indicator	optional	String(1)	No show indicator; Allowed values: 0, 1

`required* = conditionally required`

HOTEL RENTAL

MasterCard

Contract Merchant Category Code must be 3501-3999, 4722, 4723, 5962, 7011

Master Card

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"rentals"=>{"hotel_rental"=>{"purchase_identifier"=>12478, "arrival_date"=>3, "departure_date"=>"2018-02-05", "customer_code"=>1}}}');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"rentals"=>{"hotel_rental"=>{"purchase_identifier"=>12478, "arrival_date"=>3, "departure_date"=>"2018-02-05", "customer_code"=>1}}}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "rentals": {
        "hotel_rental": {
          "purchase_identifier": 12478,
          "arrival_date": 3,
          "departure_date": "2018-02-05",
          "customer_code": 1
        }
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <.../>
    <travel>
      <rentals>
        <hotel_rental>
          <purchase_identifier>12478</purchase_identifier>
          <arrival_date>3</arrival_date>
          <departure_date>2018-02-05</departure_date>
          <customer_code>1</customer_code>
        </hotel_rental>
      </rentals>
    </travel>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	required		
rentals	required		
hotel_rental	required		
purchase_identifier	required*	String(10)	Rental Agreement Number / Hotel Folio Number.
arrival_date	required	String(10)	Hotel check-in date.
departure_date	required	String(10)	The departure date. Date can be in future.
customer_code	required*	String(17)	The customer code. Internal Reference.

`required* = conditionally required`

Visa

Contract Merchant Category Code must be 3501-3999, 4722, 4723, 5962, 7011

Visa

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"rentals"=>{"hotel_rental"=>{"purchase_identifier"=>2, "arrival_date"=>"2018-02-01", "extra_charges"=>467, "no_show_indicator"=>1}}}');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"rentals"=>{"hotel_rental"=>{"purchase_identifier"=>2, "arrival_date"=>"2018-02-01", "extra_charges"=>467, "no_show_indicator"=>1}}}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "rentals": {
        "hotel_rental": {
          "purchase_identifier": 2,
          "arrival_date": "2018-02-01",
          "extra_charges": 467,
          "no_show_indicator": 1
        }
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <.../>
    <travel>
      <rentals>
        <hotel_rental>
          <purchase_identifier>2</purchase_identifier>
          <arrival_date>2018-02-01</arrival_date>
          <extra_charges>467</extra_charges>
          <no_show_indicator>1</no_show_indicator>
        </hotel_rental>
      </rentals>
    </travel>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	required		
rentals	required		
hotel_rental	required		

Parameter	Required	Format	Description
purchase_identifier	optional	String(25)	Rental Agreement Number / Hotel Folio Number
arrival_date	required*	String(10)	Hotel rental Pick-up date.
departure_date	required*	String(10)	Hotel rental Departure date.
extra_charges	optional	Array(6)	Additional charges added to customer bill after check-out. Each position can be used to indicate a type of charge. Allowed values: 2, 3, 4, 5, 6, 7
no_show_indicator	optional	String(1)	No show indicator; Allowed values: 0, 1

`required* = conditionally required`

ANCILLARY CHARGES

Ancillary Charges

Charges/fees related to the ticket. These transactions are processed on a separate transaction, referenced to Airline transaction with AID.

MasterCard

Used to identify only Baggage Charges.

Contract Merchant Category Code must be 3000-3350, 4511, 4722, 4723 or 5962

Master Card

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"ticket"=>{"ticket_reference_id"=>"8b7e3575e5605ea7e1895707a3e92837"}, "charges"=>{"charge"=>{"type"=>"BG"}}}');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"ticket"=>{"ticket_reference_id"=>"8b7e3575e5605ea7e1895707a3e92837"}, "charges"=>{"charge"=>{"type"=>"BG"}}}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "ticket": {
        "ticket_reference_id": "8b7e3575e5605ea7e1895707a3e92837"
      },
      "charges": {
        "charge": {
          "type": "BG"
        }
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <.../>
    <travel>
      <ticket>
        <ticket_reference_id>8b7e3575e5605ea7e1895707a3e92837</ticket_reference_id>
      </ticket>
      <charges>
        <charge>
          <type>BG</type>
        </charge>
      </charges>
    </travel>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	required		
ticket	required		
ticket_reference_id	required	String(32)	Unique id of the ticket transaction
charges	required		
charge	required		
type	required	String(2)	This field will contain the Service Category Code for the primary type of service that has been provided. Allowed values: BG

`required* = conditionally required`

Visa

Used to identify charges for a number of ancillary services such as ticket upgrades, baggage fee, food & beverage purchases which are not purchased as part of the original ticket. Also used for charges/fees related to partial airline ticket refunds or ticket cancellations.

Contract Merchant Category Code must be 3000-3350, 4511, 4722, 4723 or 5962

Visa

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"ticket"=>{"ticket_reference_id"=>"8b7e3575e5605ea7e1895707a3e92837", "ticket_document_number"=>1111, "issued_with_ticket_number"=>12321}, "charges"=>{"charge"=>{"type"=>"BF", "sub_type"=

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"ticket"=>{"ticket_reference_id"=>"8b7e3575e5605ea7e1895707a3e92837", "ticket_document_number"=>1111, "issued_with_ticket_number"=>12321}, "charges"=>{"charge"=>{"type"=>"BF", "sub_typ

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "ticket": {
        "ticket_reference_id": "8b7e3575e5605ea7e1895707a3e92837",
        "ticket_document_number": 1111,
        "issued_with_ticket_number": 12321
      },
      "charges": {
        "charge": {
          "type": "BF",
          "sub_type": "BG"
        }
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <.../>
    <travel>
      <ticket>
        <ticket_reference_id>8b7e3575e5605ea7e1895707a3e92837</ticket_reference_id>
        <ticket_document_number>1111</ticket_document_number>
        <issued_with_ticket_number>12321</issued_with_ticket_number>
      </ticket>
      <charges>
        <charge>
          <type>BF</type>
          <sub_type>BG</sub_type>
        </charge>
      </charges>
    </travel>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	required		
ticket	required		
ticket_reference_id	required	String(32)	Unique id of the ticket transaction
ticket_document_number	required	String(15)	This field will contain the form number assigned by the carrier for the transaction.
issued_with_ticket_number	required	String(15)	If this purchase has a connection or relationship to another purchase, such as baggage fee for a passenger transport ticket, this field must contain the document number for the other purchase.
charges	required		
charge	required		
type	required	String(2)	This field will contain the Service Category Code for the primary type of service that has been provided. Allowed values: BF, BG, CF, CG, CO, FF, GF, GT, IE, LG, MD, ML, OT, PA, PT, SA, SB, SF, ST, TS, UN, UP, WI
sub_type	required	String(2)	This field will contain the Service Category Code for the secondary type of service that has been provided Allowed values: BF, BG, CF, CG, CO, FF, GF, GT, IE, LG, MD, ML, OT, PA, PT, SA, SB, SF, ST, TS, UN, UP, WI

`required* = conditionally required`

MISCELLANEOUS CHARGES

Miscellaneous charges related to the travel, but not related to the ticket.

MasterCard

Contract Merchant Category Code must be 3000-3350, 4511, 4722, 4723 or 5962

Master Card

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"ticket"=>{"ticket_reference_id"=>"8b7e3575e5605ea7e1895707a3e92837"}, "charges"=>{"charge"=>{"type"=>"MISC"}}}');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"ticket"=>{"ticket_reference_id"=>"8b7e3575e5605ea7e1895707a3e92837"}, "charges"=>{"charge"=>{"type"=>"MISC"}}}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "ticket": {
        "ticket_reference_id": "8b7e3575e5605ea7e1895707a3e92837"
      },
      "charges": {
        "charge": {
          "type": "MISC"
        }
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <.../>
    <travel>
      <ticket>
        <ticket_reference_id>8b7e3575e5605ea7e1895707a3e92837</ticket_reference_id>
      </ticket>
      <charges>
        <charge>
          <type>MISC</type>
        </charge>
      </charges>
    </travel>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	required		
ticket	required		
ticket_reference_id	required	String(32)	Unique id of the ticket transaction

Parameter	Required	Format	Description
charges	required		
charge	required		
type	required	String(4)	This field will contain the Service Category Code for the primary type of service that has been provided. Allowed values: MISC

`required* = conditionally required`

Visa

Contract Merchant Category Code must be 3000-3350, 4511, 4722, 4723 or 5962

Visa

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Sale');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"ticket"=>{"ticket_reference_id"=>"8b7e3575e5605ea7e1895707a3e92837"}, "charges"=>{"charge"=>{"type"=>"MISC"}}}');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.SaleRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    SaleRequest request = new SaleRequest();

    request.set...("");
    request.setTravel("{"ticket"=>{"ticket_reference_id"=>"8b7e3575e5605ea7e1895707a3e92837"}, "charges"=>{"charge"=>{"type"=>"MISC"}}}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.sale(
  {
    "...": "",
    "travel": {
      "ticket": {
        "ticket_reference_id": "8b7e3575e5605ea7e1895707a3e92837"
      },
      "charges": {
        "charge": {
          "type": "MISC"
        }
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <.../>
    <travel>
      <ticket>
        <ticket_reference_id>8b7e3575e5605ea7e1895707a3e92837</ticket_reference_id>
      </ticket>
      <charges>
        <charge>
          <type>MISC</type>
        </charge>
      </charges>
    </travel>
  </payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	required		
ticket	required		
ticket_reference_id	required	String(32)	Unique id of the ticket transaction
charges	required		
charge	required		
type	required	String(4)	This field will contain the Service Category Code for the primary type of service that has been provided. Allowed values: MISC

`required* = conditionally required`

Special Cases

TRAVEL AUTHORIZE (3D) AND CAPTURE

The Capture travel data is always merged with the Authorize travel data and overrides the Authorization fields (where they are present in both transactions) before validating. This makes the required travel data for Authorizations optional. This logic is applied for all Travel Types. Because of this, there are 4 scenarios for submitting travel Authorization and Capture.

Travel Authorize (3D) and Travel Capture

In this scenario the Authorize and Capture transaction requests are submitted with valid travel data. The travel data that will be used for the transaction processing is the data submitted with the Capture.

Example Travel Authorize

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('1915c52b28ff29edb12bc617ac102a03')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setCvv('834')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setTravel('{"ticket"=>{"ticket_number"=>12345678123456, "passenger_name"=>"Passenger 01", "customer_code"=>123, "restricted_ticket_indicator"=>0, "agency_name"=>"Agency", "agency_code"=>"AG001"}, "le

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.AuthorizeRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AuthorizeRequest request = new AuthorizeRequest();

    request.setTransactionId("1915c52b28ff29edb12bc617ac102a03");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setCvv("834");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setTravel("{"ticket"=>{"ticket_number"=>12345678123456, "passenger_name"=>"Passenger 01", "customer_code"=>123, "restricted_ticket_indicator"=>0, "agency_name"=>"Agency", "agency_code"=>"AG001"}, "

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize(
  {
    "transaction_id": "1915c52b28ff29edb12bc617ac102a03",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "cvv": "834",
    "expiration_month": "12",
    "expiration_year": 2022,
    "travel": {
      "ticket": {
        "ticket_number": 12345678123456,
        "passenger_name": "Passenger 01",
        "customer_code": 123,
        "restricted_ticket_indicator": 0,
        "agency_name": "Agency",
        "agency_code": "AG001"
      },
      "legs": [
        {
          "departure_date": "2017-03-10",
          "carrier_code": "VX",
          "service_class": "J",
          "origin_city": "DUB",
          "destination_city": "ATL",
          "stopover_code": 1,
          "fare_basis_code": 0,
          "flight_number": ""
        }
      ]
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize</transaction_type>
    <transaction_id>1915c52b28ff29edb12bc617ac102a03</transaction_id>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <cvv>834</cvv>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <travel>
      <ticket>
        <ticket_number>12345678123456</ticket_number>
        <passenger_name>Passenger 01</passenger_name>
        <customer_code>123</customer_code>
        <restricted_ticket_indicator>0</restricted_ticket_indicator>
        <agency_name>Agency</agency_name>
        <agency_code>AG001</agency_code>
      </ticket>
      <legs>
        <leg>
          <departure_date>2017-03-10</departure_date>
          <carrier_code>VX</carrier_code>
          <service_class>J</service_class>
          <origin_city>DUB</origin_city>
          <destination_city>ATL</destination_city>
          <stopover_code>1</stopover_code>
          <fare_basis_code>0</fare_basis_code>
          <flight_number/>
        </leg>
      </legs>
    </travel>
  </payment_transaction>'
```

Example Travel Capture

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Capture');
    $request = $genesis->request();

    $request
        ->setTransactionId('7fcc6097153beeec1dd1e71f643198d8')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setReferenceId('1f2ee425e7c3159c60743098071771eb')
        ->setTravel('{"ticket"=>{"ticket_number"=>12345678123456, "passenger_name"=>"Passenger 01", "customer_code"=>"", "restricted_ticket_indicator"=>0, "agency_name"=>"New Agency", "agency_code"=>"AGN001"},

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.CaptureRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    CaptureRequest request = new CaptureRequest();

    request.setTransactionId("7fcc6097153beeec1dd1e71f643198d8");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setReferenceId("1f2ee425e7c3159c60743098071771eb");
    request.setTravel("{"ticket"=>{"ticket_number"=>12345678123456, "passenger_name"=>"Passenger 01", "customer_code"=>"", "restricted_ticket_indicator"=>0, "agency_name"=>"New Agency", "agency_code"=>"AGN001"

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.capture(
  {
    "transaction_id": "7fcc6097153beeec1dd1e71f643198d8",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "reference_id": "1f2ee425e7c3159c60743098071771eb",
    "travel": {
      "ticket": {
        "ticket_number": 12345678123456,
        "passenger_name": "Passenger 01",
        "customer_code": "",
        "restricted_ticket_indicator": 0,
        "agency_name": "New Agency",
        "agency_code": "AGN001"
      },
      "legs": [
        {
          "departure_date": "2017-03-10",
          "carrier_code": "VX",
          "service_class": "J",
          "origin_city": "DUB",
          "destination_city": "ATL",
          "stopover_code": 1,
          "fare_basis_code": 0,
          "flight_number": ""
        }
      ]
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>capture</transaction_type>
    <transaction_id>7fcc6097153beeec1dd1e71f643198d8</transaction_id>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <reference_id>1f2ee425e7c3159c60743098071771eb</reference_id>
    <travel>
      <ticket>
        <ticket_number>12345678123456</ticket_number>
        <passenger_name>Passenger 01</passenger_name>
        <customer_code/>
        <restricted_ticket_indicator>0</restricted_ticket_indicator>
        <agency_name>New Agency</agency_name>
        <agency_code>AGN001</agency_code>
      </ticket>
      <legs>
        <leg>
          <departure_date>2017-03-10</departure_date>
          <carrier_code>VX</carrier_code>
          <service_class>J</service_class>
          <origin_city>DUB</origin_city>
          <destination_city>ATL</destination_city>
          <stopover_code>1</stopover_code>
          <fare_basis_code>0</fare_basis_code>
          <flight_number/>
        </leg>
      </legs>
    </travel>
  </payment_transaction>'
```

Non Travel Authorize (3D) and Travel Capture

In this scenario the Authorize request doesn't contain the travel data. Valid travel data is submitted in the Capture transaction request. The travel data that will be used for the transaction processing is the data submitted with the Capture.

Example Non Travel Authorize

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('1915c52b28ff29edb12bc617ac102a03')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setCvv('834')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.AuthorizeRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AuthorizeRequest request = new AuthorizeRequest();

    request.setTransactionId("1915c52b28ff29edb12bc617ac102a03");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setCvv("834");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize(
  {
    "transaction_id": "1915c52b28ff29edb12bc617ac102a03",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "cvv": "834",
    "expiration_month": "12",
    "expiration_year": 2022
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize</transaction_type>
    <transaction_id>1915c52b28ff29edb12bc617ac102a03</transaction_id>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <cvv>834</cvv>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
  </payment_transaction>'
```

Example Travel Capture

Request

```
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Capture');
    $request = $genesis->request();

    $request
        ->setTransactionId('7fcc6097153beeec1dd1e71f643198d8')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setReferenceId('1f2ee425e7c3159c60743098071771eb')
        ->setTravel('{"ticket"=>{"ticket_number"=>12345678123456, "passenger_name"=>"Passenger 01", "customer_code"=>"", "restricted_ticket_indicator"=>0, "agency_name"=>"New Agency", "agency_code"=>"AGN001"},

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.CaptureRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    CaptureRequest request = new CaptureRequest();

    request.setTransactionId("7fcc6097153beeec1dd1e71f643198d8");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setReferenceId("1f2ee425e7c3159c60743098071771eb");
    request.setTravel("{"ticket"=>{"ticket_number"=>12345678123456, "passenger_name"=>"Passenger 01", "customer_code"=>"", "restricted_ticket_indicator"=>0, "agency_name"=>"New Agency", "agency_code"=>"AGN001"

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.capture(
  {
    "transaction_id": "7fcc6097153beeec1dd1e71f643198d8",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "reference_id": "1f2ee425e7c3159c60743098071771eb",
    "travel": {
      "ticket": {
        "ticket_number": 12345678123456,
        "passenger_name": "Passenger 01",
        "customer_code": "",
        "restricted_ticket_indicator": 0,
        "agency_name": "New Agency",
        "agency_code": "AGN001"
      },
      "legs": [
        {
          "departure_date": "2017-03-10",
          "carrier_code": "VX",
          "service_class": "J",
          "origin_city": "DUB",
          "destination_city": "ATL",
          "stopover_code": 1,
          "fare_basis_code": 0,
          "flight_number": ""
        }
      ]
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>capture</transaction_type>
    <transaction_id>7fcc6097153beeec1dd1e71f643198d8</transaction_id>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <reference_id>1f2ee425e7c3159c60743098071771eb</reference_id>
    <travel>
      <ticket>
        <ticket_number>12345678123456</ticket_number>
        <passenger_name>Passenger 01</passenger_name>
        <customer_code/>
        <restricted_ticket_indicator>0</restricted_ticket_indicator>
        <agency_name>New Agency</agency_name>
        <agency_code>AGN001</agency_code>
      </ticket>
      <legs>
        <leg>
          <departure_date>2017-03-10</departure_date>
          <carrier_code>VX</carrier_code>
          <service_class>J</service_class>
          <origin_city>DUB</origin_city>
          <destination_city>ATL</destination_city>
          <stopover_code>1</stopover_code>
          <fare_basis_code>0</fare_basis_code>
          <flight_number/>
        </leg>
      </legs>
    </travel>
  </payment_transaction>'
```

Travel Authorize (3D) and Non Travel Capture

In this scenario the Authorize request contains valid travel data. Travel data isn't submitted in the Capture transaction request. In this case the Capture transaction will inherit the travel data from the Authorize transaction. The travel data that will be used for the transaction processing is the data submitted with the Authorize.

Example Travel Authorize

Request

```
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('1915c52b28ff29edb12bc617ac102a03')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setCvv('834')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setTravel('{"ticket"=>{"ticket_number"=>12345678123456, "passenger_name"=>"Passenger 01", "customer_code"=>123, "restricted_ticket_indicator"=>0, "agency_name"=>"Agency", "agency_code"=>"AG001"}, "le

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.AuthorizeRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AuthorizeRequest request = new AuthorizeRequest();

    request.setTransactionId("1915c52b28ff29edb12bc617ac102a03");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setCvv("834");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setTravel("{"ticket"=>{"ticket_number"=>12345678123456, "passenger_name"=>"Passenger 01", "customer_code"=>123, "restricted_ticket_indicator"=>0, "agency_name"=>"Agency", "agency_code"=>"AG001"}, "

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize(
  {
    "transaction_id": "1915c52b28ff29edb12bc617ac102a03",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "cvv": "834",
    "expiration_month": "12",
    "expiration_year": 2022,
    "travel": {
      "ticket": {
        "ticket_number": 12345678123456,
        "passenger_name": "Passenger 01",
        "customer_code": 123,
        "restricted_ticket_indicator": 0,
        "agency_name": "Agency",
        "agency_code": "AG001"
      },
      "legs": [
        {
          "departure_date": "2017-03-10",
          "carrier_code": "VX",
          "service_class": "J",
          "origin_city": "DUB",
          "destination_city": "ATL",
          "stopover_code": 1,
          "fare_basis_code": 0,
          "flight_number": ""
        }
      ]
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize</transaction_type>
    <transaction_id>1915c52b28ff29edb12bc617ac102a03</transaction_id>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <cvv>834</cvv>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <travel>
      <ticket>
        <ticket_number>12345678123456</ticket_number>
        <passenger_name>Passenger 01</passenger_name>
        <customer_code>123</customer_code>
        <restricted_ticket_indicator>0</restricted_ticket_indicator>
        <agency_name>Agency</agency_name>
        <agency_code>AG001</agency_code>
      </ticket>
      <legs>
        <leg>
          <departure_date>2017-03-10</departure_date>
          <carrier_code>VX</carrier_code>
          <service_class>J</service_class>
          <origin_city>DUB</origin_city>
          <destination_city>ATL</destination_city>
          <stopover_code>1</stopover_code>
          <fare_basis_code>0</fare_basis_code>
          <flight_number/>
        </leg>
      </legs>
    </travel>
  </payment_transaction>'
```

Example Non Travel Capture

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Capture');
    $request = $genesis->request();

    $request
        ->setTransactionId('7fcc6097153beeec1dd1e71f643198d8')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setReferenceId('1f2ee425e7c3159c60743098071771eb');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.CaptureRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    CaptureRequest request = new CaptureRequest();

    request.setTransactionId("7fcc6097153beeec1dd1e71f643198d8");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setReferenceId("1f2ee425e7c3159c60743098071771eb");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.capture(
  {
    "transaction_id": "7fcc6097153beeec1dd1e71f643198d8",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "reference_id": "1f2ee425e7c3159c60743098071771eb"
  }
).send()
  .then(success)
  .catch(failure);
```

```bash
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>capture</transaction_type>
    <transaction_id>7fcc6097153beeec1dd1e71f643198d8</transaction_id>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <reference_id>1f2ee425e7c3159c60743098071771eb</reference_id>
  </payment_transaction>'
```

Partial Travel Authorize (3D) and Partial Travel Capture

In this scenario the Authorize request contains only part of the travel data. The Capture transaction request contains also part of the travel data. The travel data from the Authorize will be merged with the Capture travel data. The Capture travel data will complete/override the travel fields in the Authorize. This merged data will be stored as Capture travel data. If the merged data is valid travel data then the transaction will be processed as travel using the travel data stored in the Capture. Otherwise the transaction will be processed as a regular Capture transaction.

Example Partial Authorize

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Cards\Authorize');
    $request = $genesis->request();

    $request
        ->setTransactionId('1915c52b28ff29edb12bc617ac102a03')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setCardHolder('Travis Pastrana')
        ->setCardNumber('4200000000000000')
        ->setCvv('834')
        ->setExpirationMonth('12')
        ->setExpirationYear('2022')
        ->setTravel('{"ticket"=>{}, "legs"=>[{"departure_date"=>"2017-03-10", "carrier_code"=>"VX", "service_class"=>"J", "origin_city"=>"DUB", "destination_city"=>"ATL", "stopover_code"=>1, "fare_basis_code"=

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.card.AuthorizeRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    AuthorizeRequest request = new AuthorizeRequest();

    request.setTransactionId("1915c52b28ff29edb12bc617ac102a03");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setCardHolder("Travis Pastrana");
    request.setCardNumber("4200000000000000");
    request.setCvv("834");
    request.setExpirationMonth("12");
    request.setExpirationYear("2022");
    request.setTravel("{"ticket"=>{}, "legs"=>[{"departure_date"=>"2017-03-10", "carrier_code"=>"VX", "service_class"=>"J", "origin_city"=>"DUB", "destination_city"=>"ATL", "stopover_code"=>1, "fare_basis_code

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.authorize(
  {
    "transaction_id": "1915c52b28ff29edb12bc617ac102a03",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "card_holder": "Travis Pastrana",
    "card_number": "4200000000000000",
    "cvv": "834",
    "expiration_month": "12",
    "expiration_year": 2022,
    "travel": {
      "ticket": {
      },
      "legs": [
        {
          "departure_date": "2017-03-10",
          "carrier_code": "VX",
          "service_class": "J",
          "origin_city": "DUB",
          "destination_city": "ATL",
          "stopover_code": 1,
          "fare_basis_code": 0,
          "flight_number": ""
        }
      ]
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>authorize</transaction_type>
    <transaction_id>1915c52b28ff29edb12bc617ac102a03</transaction_id>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <card_holder>Travis Pastrana</card_holder>
    <card_number>4200000000000000</card_number>
    <cvv>834</cvv>
    <expiration_month>12</expiration_month>
    <expiration_year>2022</expiration_year>
    <travel>
      <ticket/>
      <legs>
        <leg>
          <departure_date>2017-03-10</departure_date>
          <carrier_code>VX</carrier_code>
          <service_class>J</service_class>
          <origin_city>DUB</origin_city>
          <destination_city>ATL</destination_city>
          <stopover_code>1</stopover_code>
          <fare_basis_code>0</fare_basis_code>
          <flight_number/>
        </leg>
      </legs>
    </travel>
  </payment_transaction>'
```

Example Partial Capture

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Capture');
    $request = $genesis->request();

    $request
        ->setTransactionId('7fcc6097153beeec1dd1e71f643198d8')
        ->setRemoteIp('245.253.2.12')
        ->setAmount('100')
        ->setCurrency('USD')
        ->setReferenceId('1f2ee425e7c3159c60743098071771eb')
        ->setTravel('{"ticket"=>{"ticket_number"=>12345678123456, "passenger_name"=>"Passenger 01", "customer_code"=>"", "restricted_ticket_indicator"=>0, "agency_name"=>"New Agency", "agency_code"=>"AGN001"},

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.CaptureRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;
import java.math.BigDecimal;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    CaptureRequest request = new CaptureRequest();

    request.setTransactionId("7fcc6097153beeec1dd1e71f643198d8");
    request.setRemoteIp("245.253.2.12");
    request.setAmount(new BigDecimal(100));
    request.setCurrency("USD");
    request.setReferenceId("1f2ee425e7c3159c60743098071771eb");
    request.setTravel("{"ticket"=>{"ticket_number"=>12345678123456, "passenger_name"=>"Passenger 01", "customer_code"=>"", "restricted_ticket_indicator"=>0, "agency_name"=>"New Agency", "agency_code"=>"AGN001"

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.capture(
  {
    "transaction_id": "7fcc6097153beeec1dd1e71f643198d8",
    "remote_ip": "245.253.2.12",
    "amount": "100",
    "currency": "USD",
    "reference_id": "1f2ee425e7c3159c60743098071771eb",
    "travel": {
      "ticket": {
        "ticket_number": 12345678123456,
        "passenger_name": "Passenger 01",
        "customer_code": "",
        "restricted_ticket_indicator": 0,
        "agency_name": "New Agency",
        "agency_code": "AGN001"
      },
      "legs": [

      ]
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
   -X POST \
   -H "Content-Type: text/xml" \
   -d '
  <?xml version="1.0" encoding="UTF-8"?>
  <payment_transaction>
    <transaction_type>capture</transaction_type>
    <transaction_id>7fcc6097153beeec1dd1e71f643198d8</transaction_id>
    <remote_ip>245.253.2.12</remote_ip>
    <amount>100</amount>
    <currency>USD</currency>
    <reference_id>1f2ee425e7c3159c60743098071771eb</reference_id>
    <travel>
      <ticket>
        <ticket_number>12345678123456</ticket_number>
        <passenger_name>Passenger 01</passenger_name>
        <customer_code/>
        <restricted_ticket_indicator>0</restricted_ticket_indicator>
        <agency_name>New Agency</agency_name>
        <agency_code>AGN001</agency_code>
      </ticket>
      <legs/>
    </travel>
  </payment_transaction>'
```

VISA REFUND

The additional visa refund request parameters are applicable only when the reference transaction isAirline Itinerary Data (AID) or Ancillary Charges.

Visa Refund

Request

```php
<?php

// Load the pre-configured ini file...
\Genesis\Config::loadSettings('/path/to/config.ini');

try {
    $genesis = new Genesis('Financial\Refund');
    $request = $genesis->request();

    $request
        ->set...('')
        ->setTravel('{"ticket"=>{"credit_reason_indicator_1"=>"C", "credit_reason_indicator_2"=>"A", "ticket_change_indicator"=>"B"}}');

    $genesis->execute();
    $response = $genesis->response()->getResponseObject();
} catch (\Genesis\Exceptions\ErrorAPI $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\InvalidArgument $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\ErrorParameter $e) {
    $response = $e->getMessage();
} catch (\Genesis\Exceptions\Exception $e) {
    $response = $e->getMessage();
}
```

```java
import com.emerchantpay.gateway.GenesisClient;
import com.emerchantpay.gateway.api.TransactionResult;
import com.emerchantpay.gateway.api.constants.Endpoints;
import com.emerchantpay.gateway.api.constants.Environments;
import com.emerchantpay.gateway.api.requests.financial.RefundRequest;
import com.emerchantpay.gateway.model.Transaction;
import com.emerchantpay.gateway.util.Configuration;
import com.emerchantpay.gateway.util.Country;
import com.emerchantpay.gateway.util.Currency;

public class GenesisExample {
  public static void main()  {

    // Create configuration
    Configuration configuration = new Configuration(Environments.STAGING, Endpoints.EMERCHANTPAY);

    configuration.setUsername("SET_YOUR_USERNAME");
    configuration.setPassword("SET_YOUR_PASSWORD");
    configuration.setToken("SET_YOUR_TOKEN");

    RefundRequest request = new RefundRequest();

    request.set...("");
    request.setTravel("{"ticket"=>{"credit_reason_indicator_1"=>"C", "credit_reason_indicator_2"=>"A", "ticket_change_indicator"=>"B"}}");

    GenesisClient client = new GenesisClient(configuration, request);
    client.execute();

    // Parse Payment result
    System.out.println(client.getResponse());

  }
}
```

```javascript
var genesis = require('genesis.js/lib/genesis.js');
var transaction = new genesis.transaction();

var failure = function(reason) {
  return console.log(reason);
};

var success = function(data) {
  return console.log(data);
};

transaction.refund(
  {
    "...": "",
    "travel": {
      "ticket": {
        "credit_reason_indicator_1": "C",
        "credit_reason_indicator_2": "A",
        "ticket_change_indicator": "B"
      }
    }
  }
).send()
  .then(success)
  .catch(failure);
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/process/TERMINAL-TOKEN \
  -X POST \
  -H "Content-Type: text/xml" \
  -d '
<?xml version="1.0" encoding="UTF-8"?>
<payment_transaction>
  <.../>
  <travel>
    <ticket>
      <credit_reason_indicator_1>C</credit_reason_indicator_1>
      <credit_reason_indicator_2>A</credit_reason_indicator_2>
      <ticket_change_indicator>B</ticket_change_indicator>
    </ticket>
  </travel>
</payment_transaction>'
```

Request Parameters

Parameter	Required	Format	Description
travel	optional		
ticket	optional		
credit_reason_indicator_1	optional	String(1)	This field indicates the reason for a credit to the cardholder. Allowed values: A, B, P, O
credit_reason_indicator_2	optional	String(1)	This field indicates the reason for a credit to the cardholder. Allowed values: A, B, P, O
ticket_change_indicator	optional	String(1)	This field will contain either a space or a code to indicate why a ticket was changed. Allowed values: C, N

`required* = conditionally required`

Allowed Values

CAR RENTAL CLASSES

Value	Description
1	Mini
2	Subcompact
3	Economy
4	Compact
5	Midsize
6	Intermediate
7	Standard
8	Full size
9	Luxury
10	Premium
11	Minivan
12	12 passenger van
13	Moving van
14	15 passenger van
15	Cargo van
16	12 foot truck
17	20 foot truck
18	24 foot truck
19	26 foot truck
20	Moped
21	Stretch limousine
22	Regular limousine
23	Unique limousine

Value	Description
24	Exotic limousine
25	Small/medium truck
26	Large truck
27	Small SUV
28	Medium SUV
29	Large SUV
30	Exotic SUV
9999	Miscellaneous

CHARGE TYPES

Value	Description
BF	Bundled Service
BG	Baggage Fee
CF	Change Fee
CG	Cargo
CO	Carbon Offset
FF	Frequent Flyer
GF	Gift Card
GT	Ground Transport
IE	In-flight Entertainment
LG	Lounge
MD	Medical
ML	Meal / Beverage
OT	Other
PA	Passenger Assist Fee
PT	Pets
SA	Seat Fees
SB	Standby
SF	Service Fee
ST	Store
TS	Travel Service
UN	Unaccompanied Travel
UP	Upgrades
WI	Wi-Fi
MISC	Miscellaneous Airline Charges

CAR RENTAL EXTRA CHARGES

Value	Description
1	Gas
2	Extra Mileage
3	Late Return
4	1 Way Ser Fee
5	Parking Violation

HOTEL RENTAL EXTRA CHARGES

Value	Description

Value	Description
2	Restaurant
3	Gift Shop
4	Mini Bar
5	Telephone
6	Laundry
7	Other

TICKET CHANGE INDICATORS

Value	Description
C	Change to existing Ticket
N	New ticket

CREDIT REASON INDICATORS

Value	Description
A	Passenger Transport Ancillary Cancellation
B	Travel Ticket and Passenger Transport
P	Partial Refund of Travel Ticket
O	Other

Genesis SCA Services

General Info

Genesis SCA(Strong Customer Authentication) Services provides the ability to check if a transaction is in the scope of SCA. The API is synchronous and is based on RESTFul practices. Be sure to set `Content-type: application/json` in your headers.

To interact with the SCA API, you need to provide login credentials using standard HTTP Basic Authentication. (Credentials can be found in your Admin interface.)

SCA Checker

This call is used to check if SCA is required

`POST /v1/sca/checker/:terminal_token`

Request

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
curl https://username:f45ac65837d50dc26036a753e24dea9cd7d685e7@staging.gate.e-comprocessing.net/v1/sca/checker/:terminal_token \
   -X POST \
   -H "Content-Type: application/json" \
   -d '
  {
    "card_number": "4200000000000000",
    "moto": false,
    "mit": false,
    "recurring": false,
    "transaction_amount": 350000,
    "transaction_currency": "EUR",
    "transaction_exemption": ""
  }'
```

Successful Response

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
This request is not implemented yet
```

```
[
  {
    "sca_required": "no",
    "sca_result_reason": "Issuer out of the EEA",
    "exemption": null
  }
]
```

Request Parameters

Parameter	Required	Format	Description
card_number	required	string(16)	Full card number or first 6 digits.
transaction_amount	required	number	Amount of transaction in minor currency unit.
transaction_currency	required	string(3)	Transaction currency
moto	optional	boolean	Signifies whether a MOTO (mail order telephone order) transaction is performed.
mit	optional	boolean	Signifies whether a MIT (merchant initiated transaction) is performed.
recurring	optional	boolean	Signifies whether a Recurring Sale transaction is performed.
transaction_exemption	optional	string(30)	Exemption

`required* = conditionally required`

Successful Response Parameters

Parameter	Type	Description
sca_required	string	Sca Required. Possible values are `yes`, `possible_exemption` or `no`
sca_result_reason	string	The reason for the returned SCA required
exemption	string	Detected exemption. Possible values are `low_value`, `low_risk`, `trusted_merchant`, `corporate_payment` or `delegated_authentication`.