



Transaction Express Integration Guide

JSON REST

Version 6.4.3

12 Feb, 2020

Information contained herein is confidential and proprietary and shall not be duplicated, published, or disclosed (in whole or in part) without the prior written consent of Total System Services, Inc. Any unauthorized review, use, disclosure, or distribution is strictly prohibited.

Copyright 2019 Total System Services, Inc. All Rights Reserved.

Total System Services, Inc.
12202 Airport Way, Suite 100
Broomfield, CO 80021
www.tsys.com





Table of Contents

Table of Contents.....	2
1 Revisions	9
1 General Information	16
1.1 Notations / Limitations	16
1.2 Conventions	16
1.3 Universal Data Element Table.....	18
1.4 Transaction Express Web Service Endpoints, Metadata and SFTP	19
1.4.1 Certification Information	19
1.4.2 Production Information	19
1.5 Transaction Express Virtual Terminal	20
1.6 Assistance with Integration.....	20
1.7 Test Account Policy	21
1.8 Integration Certification.....	21
1.9 Certification Tools	21
1.10 Developer Requirements	22
1.10.1 Field Validation	22
1.10.2 Securing Transaction Data	22
1.10.3 TSYS SSL (Secure Socket Layer) Updates.....	22
1.10.4 Use of Domain Name vs. IP Address	22
1.11 General Disclaimers and Information	23
1.11.1 Updates and Changes	23
1.11.2 Response Messages	23
1.11.3 Examples and Samples.....	23
1.11.4 Fitness and Usability	23
1.11.5 Interchange Qualification	24



1.11.6	Credentials	24
1.11.7	AVS and Card Verification Responses	24
1.11.8	Code Implementation	24
1.11.9	eCommerce Websites	25
1.11.10	Timeout Settings	25
1.11.11	Partial Authorization	25
1.11.12	Point To Point Encryption (P2PE)	25
2	Hosted Integration Method	27
3	Post Integration Method.....	38
3.1	Credit Card Sale.....	38
3.2	Credit Card Void	47
3.3	Credit Card Refund.....	49
3.4	Credit Card Refund Void	51
3.5	ACH Sale	53
3.6	ACH Refund/Void	56
3.7	Transaction Status.....	58
4	Credit Card Web Services.....	61
4.1	Sale (with mandatory fields)	61
4.2	Sale (with conditional and optional fields)	65
4.3	Auth Only (with mandatory fields)	84
4.4	Auth Only (with conditional and optional fields).....	88
4.5	Void (with mandatory fields)	107
4.6	Force/Voice Authorization Only (with mandatory fields).....	109
4.7	Force/Voice Authorization Only (with conditional and optional fields)	112
4.8	Force/Voice Authorization Void (with mandatory fields).....	120
4.9	Credit / Return (with mandatory fields)	123
4.10	Credit / Return Void (with mandatory fields)	125
4.11	Blind Credit (with mandatory fields).....	127
4.12	Blind Credit (with conditional and optional fields)	129
4.13	Blind Credit Void (with mandatory fields)	140



4.14	Account Verification (with mandatory and conditional fields).....	142
4.15	Wallet Sale (with mandatory fields).....	147
4.16	Wallet Sale (with mandatory and conditional fields)	149
4.17	Settle (with mandatory fields)	154
4.18	Settle Void (with mandatory fields)	157
4.19	Balance Inquiry.....	159
5	Recurring Web Services	161
5.1	Create/Update Customer and Wallet Details	161
5.2	Create Wallet Details	171
5.3	Update Wallet Details	175
5.4	Create/Update Recurring Details.....	179
5.5	Create/Update Customer, Wallet, Recurring Details.....	185
5.6	Update Customer.....	196
5.7	Create Customer and Wallet Details with Transaction Number (tranNr)	198
5.8	Create Customer, Wallet and Recurring Details with Transaction Number (tranNr)	200
6	ACH Web Services	206
6.1	ACH Debit (with mandatory fields)	206
6.2	ACH Debit (with conditional and optional fields)	209
6.3	Blind Credit (with mandatory fields).....	216
6.4	Blind Credit (with conditional and optional fields)	219
6.5	ACH Cancel.....	225
6.6	ACH Refund	227
6.7	Wallet Sale (with mandatory fields).....	229
6.8	Wallet Sale (with mandatory and conditional fields)	231
7	Universal Batch File Format Specification.....	234
7.1	Batch File Information	234
7.1.1	Line Delineation	234
7.1.2	File Format	234
7.1.3	Batch Engine.....	234
7.1.4	Request and Response Examples.....	235



7.2	Batch Detail Records	239
7.3	Batch Header.....	240
7.4	Batch Trailer	241
7.5	Batch Detail Record.....	242
7.5.1	Sale (with mandatory and conditional fields)	242
7.5.2	Sale (with conditional and optional fields)	246
7.5.3	Auth Only (with mandatory fields).....	258
7.5.4	Auth Only (with conditional and optional fields).....	261
7.5.5	Void (with mandatory fields)	272
7.5.6	Force/Voice Authorization Only (with mandatory fields).....	275
7.5.7	Force/Voice Authorization Only (with conditional and optional fields)	278
7.5.8	Force/Voice Auth Void (with mandatory fields)	288
7.5.9	Blind Credit (with mandatory and conditional fields).....	290
7.5.10	Blind Credit (with conditional and optional fields)	295
7.5.11	Blind Credit Void (with mandatory fields).....	306
7.5.12	Credit /Return (with mandatory fields)	308
7.5.13	Credit/Return Void (with mandatory fields)	312
7.5.14	Account Verification (with mandatory and conditional fields).....	315
7.5.15	Wallet Sale (with mandatory fields).....	319
7.5.16	Wallet Sale (with mandatory and conditional fields).....	321
7.5.17	Settle (with mandatory and conditional fields)	327
7.5.18	Settle Void (with mandatory fields)	330
7.6	Recurring Payments	332
7.6.1	Create/Update Customer and Wallet Details	332
7.6.2	Create Wallet Details	339
7.6.3	Update Wallet Details	343
7.6.4	Create/Update Recurring Details.....	348
7.6.5	Create/Update Customer, Wallet, Recurring Details.....	354
7.6.6	Update Customer.....	366
7.6.7	Create Customer and Wallet Details with Transaction Number (tranNr)	368



7.6.8	Create Customer, Wallet and Recurring Details with Transaction Number (tranNr)	369
8	Reporting Web Services	376
8.1	Find Customer Details	376
8.2	Find Wallet Details	379
8.3	Find Recurring Details	382
8.4	Get Transaction	384
8.5	Get Authorization Summary	387
8.6	Get Daily Settlement Summary	390
8.7	Get Daily Transaction Summary	393
8.8	Get Decline Response Code Summary	398
8.9	Get Decline Summary	402
8.10	Get Expired Cards	406
8.11	Get Recurring Problem Profiles	410
8.12	Get Recurring Profiles	417
8.13	Get Settle by Date	422
8.14	Get Settlement Summary	424
8.15	Get Summary Transactions	428
8.16	Get Transaction Details	435
8.17	Get Verification Decline Code Summary	444
8.18	Get Customer LookUp	447
8.19	Get ACH Running Balance	451
8.20	Get ACH Daily Account Statement	455
8.21	Get ACH Daily Remittance	460
8.22	Get ACH Monthly Statement	464
8.23	Get ACH Reserves Details	467
8.24	Get ACH Returns	470
8.25	Get ACH Settlements	473
8.26	Get Notice of Change List	477
9	Appendix	479
9.1	Allowed Special Characters	479



9.2	Allowed P2Pe Characters	480
9.3	Fault	480
9.4	Error Codes	481
9.4.1	General Error Codes	481
9.4.2	FndRecurrProf Error Codes	483
9.4.3	SendTran Error Codes	483
9.4.4	SendTran P2PE Error Response Codes	486
9.4.5	UpdtRecurrProf Error Codes	489
9.4.6	Reporting Web Services Error Response Codes	491
9.4.7	RecurrProfFromTran	493
9.4.8	Web Page Error Codes	493
9.5	Transaction Status	494
9.5.1	Credit Card Status	494
9.5.2	ACH Status	495
9.6	Batch Status Codes	496
9.7	Batch XML Error Tag	496
9.8	Transaction Response Codes	497
9.9	Extended Response Codes	502
9.10	Partial Authorization Response Table	504
9.11	Web Services Response Data Definition	505
9.12	Hosted Response Data Definition	507
9.13	POST Response Data Definition	508
9.14	Address Verification Service (AVS) Response Codes	509
9.15	Card Verification (CVV2/CVC2) Response Codes	510
9.16	ACH Transaction Status Codes	511
9.17	ACH Response Codes	512
9.18	ACH Return Reason Codes	514
9.19	ACH Back Office Exception Codes	516
9.20	ACH NOC (Notification of Change) Codes	517
9.21	ACH Fraud Check Values	518



9.22	Soft Descriptor Format Requirements (approval required before use)	521
9.23	US State Abbreviations	523
9.24	Card Authentication Appendices	525
9.24.1	CAVV Result Codes.....	525
9.24.2	ECI Result Codes.....	525
9.25	Certification and Test Matrix Values.....	527
9.25.1	Standard Credit Card Responses.....	527
9.25.2	Address Verification Service (AVS) Responses.....	531
9.25.3	Card Verification Value (CVV) Responses	532
9.25.4	Card Authentication Test Matrix.....	533
9.25.5	Test Credit Cards	534
9.25.6	Standard ACH Responses	535
9.25.7	Test Bank Accounts	536



1 Revisions

Date	Revision Description	Version #	Page
01/03/12	Minor formatting changes; some spelling corrections; minor grammar corrections; added two field definitions in Merchant eReports.	2.1	Various
01/10/12	Some email fields were missing a condition. This has been corrected.	2.2	Various
06/20/12	In Chapter 2, corrected an error with one element description; all contact.addrLn1 elements now have a new condition: <i>Address is required for card-not-present qualification.</i> ; and all contact.zipCode elements now have a new condition: <i>Zip code is required for card-not-present qualification.</i> Added Chapter 4 (ACH Payments) and adjusted the numbering of subsequent chapters accordingly. Changed data elements reqAmt, recur.amt, and tax.amt to n..8. Changed definition for the user-defined field throughout the Guide. Updated all chapters to accommodate ACH. This included significant work in Chapter 6, eReporting, and Chapter 5, Batch File Format Specification. Finalized the Recurring definitions to reflect the addition of new elements. Updated all ACH entries to reflect the final definition of fraudChk and credit agency requirements.	3.0	Various
07/05/12	Multiple small corrections provided by several different SMEs.	3.1	Various
08/22/12	Corrected all incorrect case in the element names. Made other corrections as per directions from Jennifer.	3.2	Various
01/11/13	Deleted ach.fraudChk fields	3.52	Various
01/22/13	Added Fraud Check Response Fields table & modified response for ACH methods	3.52	Various
02/05/13	Added Response Data Definition table	3.52	314



Transaction Express Integration Guide



Date	Revision Description	Version #	Page
02/06/13	Converted examples in sendtran to styles	3.52	Various
02/14/13	Added Hosted and Post	3.60	Various
02/26/13	Updated POST Cert URL's with correct URL, Updated batch sample headers, Updated cert URL's	3.61	Various
02/28/13	Updated Fraud check table with new information from Lexis Nexis	3.62	331
03/15/13	Updated tranNr character length, add – symbol to refunds in RW, added indCode to Wallet Sale	3.64	Various
04/23/13	Added blog sites, Added PostRspMsg to Hosted and updated several data fields in HOSTED and POST	3.65	Various
05/10/13	Added notation pertaining to utilization of domain names.	3.67	Various
05/17/13	Updated hyperlinks, updated conditions pertaining to overwriting data when updating customer, wallet, recurring profiles, relocated partial authorization table.	3.68	Various
05/23/13	Added details for RCM and Interchange Optimization, updated Date/Time format throughout the document.	3.69	Various
06/19/13	Updated URL's to reflect new transaction express domain name, Added ACH Transaction Status Code Table, Updated Credit/Refund definition and updated field order in reports.	3.69	Various
06/20/13	Update Credit Card Void URL for POST method from cart to card.	3.69	URL Correction
07/31/13	Removed Get CardLookup, Added reporting ws error code table, updated user defined fields, update isPartialAuthorization field in response data for GetTransaction, GetTransactionDetails and GetSummaryTransactions ws reports, Updated ShipToZipCode description to state for card not present Amex transactions, updated transaction response codes to include TSYS and ACI mapping..	3.70	Various
08/01/13	Update Start Date format for TX Hosted	3.71	Various
08/05/13	Added new response fields ApprovedAuthAmount and RequestedSettleAmount to GetTransaction, GetTransactionDetails and GetSummaryTransactions ws reports.	3.71	Various
08/19/13	Added sec field to account verification request and response, Added Transaction status tables for CC and ACH, updated format requirements to amount, tax amount and recurring amount fields in Hosted section, renamed sections Standard Point of Sale transactions	3.71	Various



Transaction Express Integration Guide



Date	Revision Description	Version #	Page
	and Merchant eReports to Transaction Processing WebService and Transaction Reporting Web Service.		
08/21/13	Add Hosted Response Data Definition, Add Wallet Sale to ACH section, Updated section names	3.72	Various
08/27/13	Updated add/update wallet contact.id condition, Updated reports to show ascending default, updated ACH Blind credit description to indicate account vs. card.	3.73	Various
09/30/13	Added batch file details re: naming conventions, file extensions, sample requests and responses, added timeout settings section, updated PST time zone requirement in reporting ws section and added COL.definition in reporting ws section and updated find customer, wallet and recurring profile definitions. Added new error code to UpdtRecurrProf Error Code table. Added Settle Void function includes revAuthOnVoid flag	3.74	Various
10/31/13	Updated batch id definition in batch header section, updated record note in batch detail record section, updated batch status code definitions 10 and 11, added note to general section and ACH status table, updated all references from webservices to webservice in the reporting ws section, updated transaction response code table to identify authorized response codes, added blog spot note on page 1, added user defined fields to recurring profile sections and wallet sale sections, added note re: phone number format requirement for ACH transactions, added note field to customer profile, added optional fields to the FndRecurrProf section, added missing fields in Reporting web services methods, added note re: ACH daily settlement in ACH web services section and ACH certification matrix, updated character length for recurMan.id in all sections	4.00	Various
12/12/13	Updated GetTransaction report to reflect correct description, Updated fields in the GetTransactionDetail Example Request, Updated ACH response table, Updated ToDate description in all summary reports.	4.01	Various
12/18/13	Updated description to Number of Payments field in the TXP hosted section.	4.02	23
12/19/13	Removed ACH seccCode from Add/Update Wallet sections	4.02	Various
01/10/14	Added partial auth test cases for VI and MC, Removed RURL Field from all POST request functions, updated ACH response code table to separate the response codes from 06/12 to 06 and 12.	4.03	Various
01/17/14	Updated Note re: Tax Amount field description when referencing indicator 0 and 2.	4.03	Various
01/20/14	Updated card.dbtOrCdt field to indicate only credit value available, updated recur.dbtOrCdt field to indicate only debit value available, added software descriptor field and appendix	4.03	Various



Transaction Express Integration Guide



Date	Revision Description	Version #	Page
01/22/14	Added Partial Authorization section.	4.03	17
12/31/14	Removed references to prod type for credit card and ach as it doesn't apply for find wallet and find customer, wallet, recurring, Updated field requirement to optional for pan and account number for find wallet and find customer, wallet, recurring.	4.04	Various
02/27/14	Updated description to the tranFlags.dupChkTmPrd field to state this field overrides the dup check settings in the TXP account, added card authentication fields to POST, Credit Card web services requests and responses, added card authentication CAVV Result code appendix, added card authentication test matrix, added card authentication field to GetTransactionDetail Report, added POST Response data definition table	4.04	Various
03/13/14	Added new fields authReq.ordNr, merc.id, usrDef.name, usrDef.value(maximum of five can be defined in the VT) in response examples to web services and batch input types for transaction codes Auth Only, Auth Settle, Force Auth, Blind Credit, Credit/Return and Wallet Sale	4.04	Various
03/24/14	Added Web page error codes on page 374, added ACH Notice of Change List, removed ECOM option from indCode in the recurring profile section for both web services and batch.	4.04	Various
04/07/14	Added new field merc.inType in response examples to web services and batch input types for transaction codes Auth Only, Auth Settle, Force Auth, Blind Credit, Credit/Return and Wallet Sale, Added new extended response code field B40Z – undefined user defined field	4.05	Various
04/11/14	Visa/MC Regulation Requirements: Added GoodsSoldCode, Device Type and Mobile payment to Hosted, Post Credit Card Sale, Auth only with conditional fields, Auth/Settle with conditional fields in the web services and batch sections, Added GoodsSoldCode to GetTransaction report on page 278	4.06	Various
04/28/14	Updated ACH account number format, added Auth Only tran code for credit card wallet sales.	4.07	Various
05/13/14	Updated trk1 and trk 2 description to indicate conditional field.	4.07	Various
05/19/14	Added request examples to POST section, updated batch inType format, removed B40Z extended code, removed ACH seccode for WEB from Blind Credit function, added wallet id field to GetTransactionDetails report results.	4.07	Various
05/23/14	Removed new response fields authReq.ordNr, merc.id, merc.inType, usrDef.name, usrDef.value(maximum of five can be defined in the VT) from response examples to web services and batch input types for transaction codes Auth Only, Auth Settle, Force Auth, Blind Credit,	4.07	Various



Transaction Express Integration Guide



Date	Revision Description	Version #	Page
	Credit/Return and Wallet Sale.		
06/26/14	Removed allowed special characters from Account Holder Name for Hosted and PO Number from Web services.	4.08	Various
06/26/14	Updated Test Card Table	4.09	Various
07/21/14	Updated amount field max character length, Updated Sample Post requests,	4.10	Various
07/31/14	Updated max characters for Page Count and Page Size, Added Batch xml error tag appendix table includes sample.	4.11	Various
08/11/14	Updated reqAmt in Settlement call	4.12	Various
08/27/14	Updated achEcheck.seccCode field to conditional	4.12	Various
09/12/14	Added Universal Data Element Table, updated PO # description	4.12	Various
11/13/14	Minor updates to sample requests, Added note to batch section re: reviewing records within a response file	4.13	Various
02/02/15	Added Extended rsp code B410, added response codes N1 and 1106	4.14	Various
03/10/15	Removed savings from the account number description for ACH Sale (POST). Added Extended response codes B40U, B40V & B40Y to the table.	4.14	Various
04/15/15	Added Batch Request and Response examples when submitting an empty batch, removed response code 32 as it applies to MC partial reversals. TXP doesn't support partial reversals, Updated error code tables.	4.14	Various
05/19/15	Updated batch tran codes to include ACH void/Refund, Removed ach fraud flag reference in fraud check table.	4.15	Various
06/04/15	Updated ACH refund description to indicate full refund as partial refunds for ACH are not available/supported.	4.15	Various
07/14/15	Updated ACH Account number field with NACHA length requirements.	4.15	Various
07/16/15	Removed special character " "pipe/vertical bar from the allowed special character table. It is a prohibited/not allowed character.	4.15	371
01/28/16	Updated code example on page 146. Updated transaction code description for 08, 11 and 16 to indicate a declined response. Updated Device Type codes in POST and Web Services transactions. Added new	4.16	Various



Date	Revision Description	Version #	Page
	error code 50029 – Merchant Closed. Created new sections to web services to include Add Customer and Wallet, Update Customer examples. Removed all instances of ACH Drivers License, SSN and DOB fields TXP doesn't support the enhanced Fraud check service. Added new Create customer, wallet and recurring with tranNr web service method. Updated Hosted and recurring web service billing cycle from Bi Monthly to Every 2 weeks.		
03/21/16	Added ACH response code re: Zip code character limit, Updated SecRslt field in Hosted definition table, updated footer error in the UBF section, added note to RecurrProfFromTran call	4.17	Various
04/11/16	Added Response Message section and updated recurring web services and batch sections to include 1 = Update code.	4.18	Various
05/17/16	Corrections to sample requests and responses in recurring sections. Updated Hosted response examples	4.20	Various
06/30/16	Updated recurring section headers, added clarification to Device Type condition for MC contactless transactions.	4.21	Various
7/21/16	Added note to RecurProfFrom tran stating the method is not available for Card Not Present transactions/CNP.	4.22	Various
07/28/16	Added clarification to the description for error code 51308	2.8	398
08/25/16	Added New or masked ach.accNR to the ach.acctNR Updating Wallet section of the guide	4.23	144
05/02/17	Guide now JSON Web Services specific – SOAP removed Added new extended response codes Added sample requests and responses for Recurring and Reporting methods Added sample request and response for Create Update Customer Wallet Removed Service Virtualization Matrix Added new Partial Auth trigger amounts in Appendix table Updated the Certification and Test Matrix Values – added PayPal, MC Bin 2, 19 Digit Visa and Discover Card Types in the following section: Standard Credit Card Responses, Address Verification Service (AVS) Responses, Card Verification value (CVV) Responses and Test Credit Cards Added note to Recurring Requests that PayPal cannot be used to create a wallet Added notes on PayPal cards not allowed in Host, Post and batch processing Added note on no hyphen for 9 digit zip code value Added B411-B413 Extended Response Codes Fixed typos Updated integrationsupport email address Updated text for error code 51439	5.0	Various



Transaction Express Integration Guide



Date	Revision Description	Version #	Page
	Added various error codes Added PayPal to cardTypes list in GetTransactionDetails, GetSummaryTransactions, Appendix Response Data Definitions and AVS Response Code table Added Balance Inquiry request Moved 3 methods from Recurring section into Reporting section Updated General Information urls Added note that state values should be in all CAPS Updated GetNoticeofChangeList Report to update table and response		
09/27/17	Adjusted branding and other layout revisions, new deviceType definitions and note under section 3.4, added 10.97 to: Standard Credit Card Responses table. Added pos.termlId element to several Credit Card Web Service calls. The pos.termlId data element is required when SendTran requests are initiated from a device-based terminal. Added new entry for ACH error code 06. Included contact as a parent for ship elements. Removed Visa 19 digit test card and updated description test for test card table. Removed extra closing bracket in ACH Debit request example. Removed line of text from section 5.7 Create Customer and Wallet Details with Transaction Number stating feature is currently unavailable. Added metadata links.	6.0	Various
02/13/18	Added TerminalId to GetTransaction and GetTransactionDetails sample responses. Updated UpdtRecurrProf to add/update table entries, updating some fields to Conditional (were Optional) and add Update sample for Create/Update Customer and Wallet Details. Updated Recurring sample responses. Replaced Captcha with reCAPTCHA.	6.1	Various
06/20/18	Updated zipcode info to state 9 char zip cannot contain a hyphen. Updated 9.25.6 to state TXP Cert settlement time is 12am PST. Updated 7.5.1 to include a better batch file example. Added cust.pmt.card.type to table in 5.1. Updated 6.0 to 4PM PST	6.2	Various
02/05/19	Updated Appendix sections: Standard Credit Card, Address Verification and Card Verification Responses (9.25.1 to 9.25.3) to reflect current emulation in the Cert environment	6.3	527-532
02/08/19	Updated Appendix section: Standard Credit Card (9.25.1) to correctly reflect current emulation in the Cert environment as no Response Code: 85 is returned. Instead a 00 is returned.	6.3	529,531
07/15/19	Updated Hosted section to add "na" Updated the enum list for PaymentType for GetSummaryTransactions	6.4	29 429
07/25/19	Updated Wallet Sale example request to include 2 usrDef objects	6.4.1	231
08/20/19	Updated Appendix to add \$1.07 and \$34.04. Added description verbiage to 2 Reporting methods.	6.4.2	531
02/12/20	Updated 7.5.2 to include a MC example with a ucaf value Updated 7.5.4 to remove GoodsSoldCode	6.4.3	255 269



Date	Revision Description	Version #	Page
	Updated 7.x to better represent proper header record formatting Updated 9.4.1 to add error code 10012 Updated card.cardInputType value descriptions Updated 4.2 and 4.17 Added SendTranP2pe Settle examples Updated 4.2 and 4.4 Updated def for emvTlvReq field Updated 9.9 to add B500 and B501		480 68, 91 82, 154 79, 102 503

1 General Information

This specification details the technical requirements to enable integration of the Transaction Express (TXP) payment gateway. This document assists developers in writing software that sends defined requests to Transaction Express and processes responses received from Transaction Express.

ACH Status Updates are performed every day at 10:00 PM and 2:30 AM PST.

1.1 Notations / Limitations

- Transaction Express is a Java-based platform supporting REST/RESTful web services.
- Transaction Express supports 2 external web services:
 - Merchant Web Service
 - Reporting Web Service
- Transaction Express supports integrated batch processing over SFTP.
- Transaction Express supports a fully-functional virtual terminal.
- The only valid currency is USD (currency code 840).

1.2 Conventions

This document abides by the following conventions:

1. Unless otherwise specified, all date and time information is expressed in Pacific Standard Time (PST).
2. Under the **M/C/O** column, only the following are valid values:
 - M = Mandatory. The Description column may contain conditions.
 - C = Conditional. If an element is marked C, then the element (or other element(s) used within the same web service request) can be mandatory or optional depending on its usage. The Description column contains conditions.
 - O = Optional. The Description column may contain conditions.



3. The terms request and input are used interchangeably.
4. The terms response and output are used interchangeably.
5. The data elements marked with asterisk (*) are repeatable.
6. The data elements having inconsistent information with respect to the **M/O** flag and/or conditions follow the more specific flag and/or condition. For example, if an element is labeled M on the data type definition but O on the web services call, then the element is optional because the web services call has more specific information than the data type definition.
7. The data elements marked M or O with conditions under the **Description** column follow the conditions under the **Description** column. So, the condition under the **Description** column extends (and overrides where applicable) the **M/O** column.
8. The data elements that have strike through lines are deprecated.
9. The web services call name is contained in the url and the method is always a POST.
Example: "url": "https://ws.cert.transactionexpress.com/
 TransFirst.Transaction.Web/api/SendTran",
 "method": "POST",
 "header":,
 "body": ...
10. All elements with data type **n** must not contain leading 0's unless otherwise specified.
For example, if **n2** is the format, then the data that should be sent/received is **6** rather than **06**. The leading 0's are only used for clarity. Variable-length fields are an exception.
For example, if **n..2** is the format, then the data can have leading 0's.
11. Wildcard character is denoted by an asterisk (*). For example, John* matches Johnny.
12. Unless otherwise specified within a particular field's definition, special characters include the characters specified in the appendix.
13. Under the Type column 's' stands for Special Characters.



1.3 Universal Data Element Table

This outlines the data format requirements for data elements used universally throughout the platform. Note: Address and Zip Code are required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.

Element	Type	Description
Full Name	ans..61	This is the customer's full name.
Address Line 1	ans..50	This is the customer's street address line 1. Conditions: ② This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification. ② If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements.
Zip Code	ans..9	This is the customer's ZIP code. Conditions: ② This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification. ② If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. Note: Hyphen is not allowed for a 9 digit value.
State	a2	This is the customer's state. Values must be in all CAPS.
Card Number(card.pan)	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.
Expiration Date	n4 YYMM	Expiration Date: This is the expiration date of the card.
CVV2(card.sec)	n..4	CVV2/CVC2/CID: This is the 3- or 4-digit card verification code located on the card.
Account Number		This is the customer's checking/savings account number.
Routing Number	n..17	This is the routing number of the customer's bank.
Company Name	ans..30	This is the customer's company name.
E-mail Address	ans..75	This is the customer's email address. Valid Special Characters: ② . ② _ ② % ② + ② - ② @ Note: A special character cannot be the first character in this field.
Phone Number	ans..12	This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters. Valid special character: ② -



1.4 Transaction Express Web Service Endpoints, Metadata and SFTP

Note: In the .NET environment, whenever any input parameter/field is passed in the request, the “specified” property (*if available*) related to the specific input parameter/field also needs to be set to “true”. For example, if the value of the “id” parameter is passed in the request, you must set “idSpecified” to “true”.

Furthermore, whenever any object/parameter/field is not used in the input/request, please pass “null” on its position. Please do not pass “Empty” objects.

1.4.1 Certification Information

The Certification endpoint is:

<https://cert.web.transaction.transactionexpress.com/TransFirst.Transaction.Web/api/{service}>

e.g. <https://cert.web.transaction.transactionexpress.com/TransFirst.Transaction.Web/api/SendTran>

Metadata is located at:

<https://cert.web.transaction.transactionexpress.com/TransFirst.Transaction.Web/api/metadata>

Reporting Web Service uses the endpoint:

<https://cert.web.reportingsys.transactionexpress.com/TransFirst.ReportingSys.Web/api/{service}>

e.g.

<https://cert.web.reportingsys.transactionexpress.com/TransFirst.ReportingSys.Web/api/GetTransaction>

Metadata is located at:

<https://cert.web.reportingsys.transactionexpress.com/TransFirst.ReportingSys.Web/api/metadata>

The Certification version of the SFTP batch file upload host is located at:

<sftp.cert.transactionexpress.com> (port 22)

1.4.2 Production Information

The Production endpoint is:

<https://transaction.web.transactionexpress.com/TransFirst.Transaction.Web/api/{service}>

e.g. <https://transaction.web.transactionexpress.com/TransFirst.Transaction.Web/api/UpdtRecurrProf>



Metadata is located at:

<https://transaction.web.transactionexpress.com/TransFirst.Transaction.Web/api/metadata>

Reporting Web Service uses the endpoint:

<https://reportingsys.web.transactionexpress.com/TransFirst.ReportingSys.Web/api/service>

e.g.

<https://reportingsys.web.transactionexpress.com/TransFirst.ReportingSys.Web/api/GetDailyTransactionSummary>

Metadata is located at:

<https://reportingsys.web.transactionexpress.com/TransFirst.ReportingSys.Web/api/metadata>

The Production version of the SFTP batch file upload host is located at:

<sftp.transactionexpress.com> (port 22)

1.5 Transaction Express Virtual Terminal

The Certification site for the Transaction Express Virtual Terminal can be accessed at:

<https://vt.cert.transactionexpress.com/>

The Production site for the Transaction Express Virtual Terminal can be accessed at:

<https://vt.transactionexpress.com/>

1.6 Assistance with Integration

TSYS' Developer Services Department is available Monday through Friday, 8 a.m. MST – 5:00 p.m. MST. The Developer Services Department provides integration assistance to developers, vendors, or users of the Transaction Express platform, but the department does not develop or prepare code for any purpose.

Each integration request received by the Developer Services Department is assigned to a designated Integration Specialist until such integration is certified by TSYS. Therefore, it is imperative that developers work with their dedicated Integration Specialist to ensure a smooth and timely integration process.



1.7 Test Account Policy

TSYS only provides test accounts to contracted merchants or partners. Test accounts are uniquely assigned per integration request. Upon completion and/or certification of an integration, assigned test accounts may be deactivated at TSYS' discretion. Test accounts may also be deactivated for non-use whether or not the integration has been completed or certified. Should you require assistance with a test account, please contact the Developer Services Department or your assigned Integration Specialist.

1.8 Integration Certification

TSYS requires all newly completed and modified integrations to undergo a technical certification process prior to use in a live/production environment. The scope of the developed integration dictates the type and number of test cases required to be performed and documented by the developer, vendor, or user. TSYS' Developer Services Department is responsible for verifying and validating completed test cases for this certification. This certification should not be misinterpreted as any kind of PCI, PA-DSS, or similar certification or registration, which may also be required prior to use in a live/production environment.

1.9 Certification Tools

The appendix contains three transaction tables. These tables provide transaction dollar amounts that return specific response codes and text. You can find these tables at:

- [Certification and Test Matrix Values](#)
- [Address Verification Services \(AVS\) Responses](#)
- [Card Verification Value \(CVV\) Responses](#)

In addition, there is a table of test card and ACH numbers at [Test Credit Cards](#).



1.10 Developer Requirements

1.10.1 Field Validation

Please be pay close attention to field lengths and allowed field formats when developing and coding to these specifications. This documentation specifies maximum and/or exact field lengths and allowed formats of all input fields. Actual value lengths of certain fields in the production environment may currently be less than the maximum described but may expand and/or change within the described ranges at any time without advance notice.

1.10.2 Securing Transaction Data

Transaction data must always be collected and transmitted using an SSL (secure socket layer) connection. Depending on the integration method and processing solution, partners and/or merchants may be responsible for obtaining and maintaining SSL certificates that meet industry requirements.

1.10.3 TSYS SSL (Secure Socket Layer) Updates

TSYS' SSL certificates are updated on a regular basis. Partners and/or merchants may not receive advance notice of TSYS' implementation of new certificates, certificate renewals, or changes in certificate authorities.

1.10.4 Use of Domain Name vs. IP Address

All developers are encouraged to code using domain names instead of direct IP addresses. Given the architecture of the Transaction Express platform, consisting of server clusters and an active-active environment, TSYS may load-balance or transition servers in and out of service at any time. Developers who code using IP addresses risk their integrations experiencing service interruptions or outages.



1.11 General Disclaimers and Information

1.11.1 Updates and Changes

TSYS shall not be held responsible or liable for communicating updates or changes to the Transaction Express platform, Transaction Express Integration Guide(s) or related documentation, materials, or tools used to create, implement, or maintain any integration of the Transaction Express platform. It is the responsibility of the developers, vendors, or users of an integration to ensure they have the most current materials and information pertaining to the integration of this platform, and that their integration meets current requirements of the platform in order to function properly. TSYS' Developer Services Department can confirm and/or provide the most recent versions of documents and associated materials at any time.

To support the communication of general platform updates and scheduled maintenance notices, please visit and bookmark the Transaction Express Updates blog site which can be found at <http://transactionexpressupdates.blogspot.com>. On this site you can subscribe to email notifications and RSS feeds.

1.11.2 Response Messages

It is not recommended for developed integrations to code to the exact content in the response and/or error messages returned by the platform. The actual content/text of response messages will vary, expand and/or change within the described ranges at any time without advance notice. Partners and/or merchants may not receive advance notice of TSYS' implementation.

1.11.3 Examples and Samples

Any example or sample provided by TSYS is provided on an "as-is" basis without warranty of any kind. The purpose of any example or sample is to illustrate posting URLs and/or relevant data or data requirements for a particular function or request. These examples and samples are provided as a starting point for development, for reference purposes only, and may be incomplete.

1.11.4 Fitness and Usability

Some functionality documented in this guide and/or contained within the web service(s) may not have been thoroughly tested and may not be ready for production use. Additionally, developed integrations may or may not use functionality available through Transaction Express as intended. As such, TSYS cannot ensure nor be held responsible for ensuring Transaction Express' fitness for any particular purpose.

Note: The Hosted integration method is only compatible with Internet Explorer v11. Additional browser support will be available in a future release.



The processing time out in Post is 1 minute and the Idle timeout in Hosted is 20 minutes.

1.11.5 Interchange Qualification

Certain conditional and optional fields documented in this Integration Guide may impact interchange qualification. Additional Association requirements for interchange qualification may also apply.

1.11.6 Credentials

All developers, vendors and users are responsible for ensuring the privacy and security of Gateway IDs and RegKeys. The use of HTTP GET Requests is prohibited as this request format exposes these credentials. These credentials should be stored encrypted and invisible to anyone who may be able to access or use an integrated system/software, website/web page, source code or other related components. TSYS shall not be held responsible for the privacy, security, or any misuse of Gateway IDs and/or RegKeys outside of its exclusive control.

1.11.7 AVS and Card Verification Responses

Card-issuing institutions authorize and decline transactions per their own authorization guidelines. Transaction approvals may or may not be affected by address verification and/or card verification data provided by the merchant or user. Transaction Express reports address verification and card verification responses as received from such institutions, but Transaction Express itself does not control authorizations or declines with respect to any address verification and/or card verification result. However, functionality made available to a developer, vendor, or user may allow for specific handling to occur based on the result received on address verification and/or card verification requests.

1.11.8 Code Implementation

TSYS does not warrant or guarantee the success developers, vendors, or users may have in implementing any developed code in their development or production environments and/or when implementing their own web server configurations. TSYS shall not be liable for any direct, indirect, or consequential damages of any type arising from the use/non-use of any integration. Use of TSYS' systems and/or the Transaction Express platform, web services, or virtual terminal constitutes acceptance of these terms and conditions by any developer, vendor, or user.



1.11.9 eCommerce Websites

Integrated e-commerce merchant websites should contain a refund policy, cancellation policy, merchant's full address, phone number, and any additional terms and conditions.

1.11.10 Timeout Settings

TSYS recommends the timeout duration for transaction responses be set to 90 seconds.

1.11.11 Partial Authorization

What does Partial Authorization mean?

A Partial Authorization occurs when an authorization is attempted for the full amount of the transaction and there are not enough funds available to cover the full amount, so an authorization for the amount available in the account is returned. This allows the cardholder to use the card presented for the amount available and for the merchant to obtain an additional form of payment for the difference. For Prepaid Gift Cards, the issuers will also return a card balance which will be printed on the receipt.

What does this mean for the merchant?

MERCHANTS will need to pay close attention to the authorization message and receipts being returned at the point of sale. In cases where only a partial authorization is returned, the merchant will need to collect another form of payment for the difference. In the instance where the cardholder does not have another form or payment to pay the difference or wants to use a different form of payment for the full amount, a real time partial authorization reversal must be performed in order to free up the funds that were previously held up by the authorization.

Does this apply to all merchants?

The mandate is actually driven by MCC. Card not present merchants are not included at this time but because most common card present merchants are, we have made the decision to turn this functionality on for all TXP accounts that fall under the mandated MCC list. For any questions refer to your sales rep or account/relationship manager.

1.11.12 Point To Point Encryption (P2PE)

Point-to-point encryption (P2PE), which differs from end-to-end **encryption**, is a payment security solution that instantaneously converts confidential credit card data and information into indecipherable code at the swipe of the card to prevent hacking and fraud. TSYS requires KSN, Format Code= 38 and EncryptedPAN for all SendTranP2pe transactions. All of the mag strip data will be encrypted including sentinels. This is provided in the EncryptedPAN.



3DES items to consider:

Data Variant

Block encipher mode: CBC(Cipher Block Chaining)

- a. IV option is zero IV. Ex: 0000000000000000

KSN's must be separated for decryption

Padding: ISO 7816

Note: A test device is provided by TSYS as the device needs to be configured with the vendor's test BDK key.



2 Hosted Integration Method

The hosted transaction method is a POST request used for processing credit card and ACH sales, creating customer wallets or creating recurring records in merchant- or consumer-facing environments. Transaction Express hosts the secured payment/data collection page and is responsible for capturing and transmitting sensitive card and/or bank account data used for real-time processing and/or storage (creation of wallets and recurring records) for future use. The hosted page can be used to process ACH transactions as well as credit card transactions in card-present or card-not-present environments. Card-present transactions can be captured and processed using certified card readers supported by Transaction Express. For a list of supported card reader models, please contact your account representative.

In addition to the functionality and controls available in the POST request below, the Transaction Express virtual terminal allows merchants to configure certain settings pertaining to the hosted page while also offering a button-generator tool to create simple HTML-based webpage buttons that can be embedded within the merchant's website linking the merchant's webpage to the Transaction Express hosted page. Settings available in the virtual terminal are listed below. Please see the Transaction Express User Guide or Help System for additional information.

- Page Type (merchant-facing or consumer-facing; consumer-facing default)
- Payment Types Allowed (credit card, ACH, purchase card; default to merchant profile)
- Display "Swipe" Link (default to No)
- Require reCAPTCHA (default to Yes) **Required for customer facing page type.
- Display Receipt/Response Page (default to Yes)
- Custom Image (default to Yes) Size: 525X58 Support Format: .gif, .png
- Custom Image Type (default to Transaction Express)

Certification Post URL: <https://hosted.cert.transactionexpress.com>

Production Post URL: <https://hosted.transactionexpress.com>

*Customer Facing - These fields can only be utilized by pre-populating the data.

**SECCode cannot be overwritten when fraud check is enabled on the account. The transactions will default to the SEC Code set at the merchant level.

Note: For Page Type Merchant Facing, the GoodsSoldCode is required for card present American Express Gift Card Sales.

Note: As PayPal cards are only allowed on card present transactions, they are not allowed for the Hosted Integration Method.



Element	Type	Description	M/C
Gateway_ID	ans..15	Merchant Gateway ID	M
HostedKey	an..36	Merchant Hosted Key	M
RURL	ans..250	<p>Merchant's URL to redirect when the "submit" or "continue" button is selected. Send this field empty to receive post string.</p> <p>Note: The full URL path is required to be included in the POST request. EX: http://www.yourdomain.com (include https when applicable).</p>	C
CURL	ans..250	<p>Merchant's URL to redirect when the "cancel" button is selected.</p> <p>Note: The full URL path is required to be included in the POST request. EX: http://www.yourdomain.com (include https when applicable).</p>	M
RecurringType	a1	<p>Valid Values:</p> <ul style="list-style-type: none">• A = Recurring• M = Wallet• N = None (default) <p>Note: If Recurring Type equals "A", the hosted page will display the data fields for a recurring transaction. If Recurring Type equals "M", the hosted page will display the data fields for a wallet transaction. If Recurring Type equals "N", the hosted page will not display data fields for recurring or wallet transactions.</p>	O
PaymentType	a4	<p>Payment Type:</p> <ul style="list-style-type: none">• CC = Credit Card (Default)• PC = Purchase Card• ACHC = ACH Checking• ACHS = ACH Savings <p>Note: If this field isn't present in the POST request a drop down menu will provide the available payment options configured on the gateway account.</p>	O



Element	Type	Description	M/C
AVSRequired	a1	<p>Determines if address fields are required on the hosted page.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • Y = Yes • N = No <p>Note: If AVSRequired equals "Y", Address Line 1 and ZIP Code become required fields on the hosted page.</p>	M
EmailRequired	a1	<p>Determines if email field is required on the hosted page.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • Y = Yes • N = No 	M
CVV2Required	a1	<p>Determines if card security codes are required on the hosted page.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • Y = Yes • N = No <p>Note: If CVV2Required is set to "Y", than CVV2 becomes a required field on the hosted page.</p>	M
PostRspMsg	a1	<p>This field enables/disables the ability to receive response data in an POST format. When set to no, no response data is returned to the RURL.</p> <ul style="list-style-type: none"> • Y = Yes • N = No <p>Note: This field value is case sensitive.</p>	M
Amount	n..9	<p>This contains the amount associated with this transaction in minor denominations.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> • Decimal point is required when prepopulating the amount value. No other special characters are allowed. EX: 1.00 <p>Note: You can pass 0.00 to perform an account verification upon approval a wallet or recurring profile can be created. You can pass NA or na to create a wallet or recurring profile without authorizing a sale or account verification. When no amount is passed in the original post request, the hosted page will prompt for the amount.</p>	O



Element	Type	Description	M/C
CustRefID	ans..50	<p>This is the customer reference ID (order number) assigned to this transaction. This field is required for interchange qualification of MOTO and eCommerce transactions.</p> <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p> <p>This field will not be included in any account verification requests for Hosted.</p>	O
TaxIndicator	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Nontaxable• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase/business card transaction.</p>	C
TaxAmount	n..12	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• Decimal point is required when prepopulating the amount value. No other special characters are allowed. EX: 1.00 <p>Conditions:</p> <ul style="list-style-type: none">• This is required for corporate/purchase card transactions only. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase/business card transaction.</p>	C



Element	Type	Description	M/C
PONumber	ans..22	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> • SP <p>Conditions:</p> <ul style="list-style-type: none"> • This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase/business card transaction.</p>	C
ShipToZip	ans...9	<p>Condition:</p> <ul style="list-style-type: none"> • This element is only applicable/required to AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
FullName	ans..61	<p>This is the customer's full name.</p> <p>Invalid Values:</p> <ul style="list-style-type: none"> • & ampersand • ' apostrophe 	O
Address1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification. 	C
Address2	ans..50	This is the customer's street address line 2.	O
City	ans..40	This is the customer's city.	O
State	a2	This is the customer's state. Values must be in all CAPS.	O
Zip	ans..9	<p>This is the customer's Zip Code.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C



Element	Type	Description	M/C
PhoneNumber	ans..15	<p>This is the customer's phone number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> • Hyphen(-). EX: 303-101-1234 <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	O
Email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> • . • _ • % • + • - • @ <p>Note: A special character cannot be the first character in this field.</p>	O
Descriptor	ans..10	Optional: The Descriptor field is used for ACH transactions only.	O
SECCode	n1	<p>This identifies the authorization type for the ACH transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 0 = Telephone (TEL) • 1 = Internet (WEB) • 2 = Business to Consumer (PPD) • 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none"> • If set here, it overrides the value in the merchant profile setting. 	C
IndustryCode	n1	<p>This is the Industry Code that overrides the merchant profile information for a credit card transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 0 = Direct Marketing / MOTO • 1 = Retail • 2 = eCommerce • 3 = Mobile Payment * Required for card present Master Card Transactions(Available for Page Type Merchant Facing Only) <p>Conditions:</p> <ul style="list-style-type: none"> • If set here, it overrides the value in the merchant profile setting. 	C



Element	Type	Description	M/C
WalletDescription	ans..25	The Wallet Description is a unique reference value associated with the consumer and is used when RecurringType is set to A (recurring) or M (wallet).	C
PaymentFrequency	n2	<p>This is the frequency of the recurring payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 00 = Daily• 10 = Weekly• 20 = Every 2 weeks• 30 = Every 4 weeks• 40 = Every 8 weeks• 51 = Monthly• 70 = Quarterly• 80 = Yearly• 90 = Single Payment <p>Conditions:</p> <ul style="list-style-type: none">• This field is required if RecurringType = A.	C
NumberOfPayments	n2	<p>This indicates the number of scheduled payments and only applies to recurring payments (RecurringType = A). This does not impact a wallet (RecurringType = M) transaction.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This field is required if RecurringType = A.• This must be set to 1 if PaymentFrequency is set to 90 (Single Payment).	C
StartDate	dateTime	<p>This is the start date of the recurring payment plan.</p> <p>Format: MM-DD-YYYY</p> <p>Conditions:</p> <ul style="list-style-type: none">• This field is required and valid only if RecurringType = A.	C
RecurringAmount	n..12	<p>This contains the recurring amount associated with the recurring profile in minor denominations.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• Decimal point is required when prepopulating the amount value. No other special characters are allowed. EX: 1.00	C



Transaction Express Integration Guide



Sample Hosted Page

Sale

*Required Field

Payment Type: Credit Card

Sale Info

*Account Number: [swipe](#) Full Name:
*Expiration Date: Address Line 1:
*Amount: Address Line 2:
Customer Reference ID: City:
CVV2/CID: State: Zip/Postal Code:
Phone:
E-mail:

Recurring Information

Wallet Description:
*Payment Frequency: Please select
*Number of Payments: Word Verification Image: [New Image](#)
*Recurring Start Date: Type the characters in the image above:

[Submit](#) [cancel](#)

Sample Approved Receipt

Be sure to print this transaction receipt for your records.

[continue](#) [print](#)

Test Merchant
12202 Airport Way, Suite 100
Broomfield, CO 80021
303-625-8000

Approved

Date 12/2/11 13:26 PDT
Transaction ID: 310681
Ref ID:
Account: ****5939
Auth: 27919B
Amount \$1.30

Signature: _____

I, Test Customer, agree to pay the above amount according to the card issuer agreement.
(Merchant agreement if credit voucher)

Thank You!

Billing Information

Test Customer
470 Emerald Ave
San Carlos, CA 94070
510-555-0000
jsmith@yahoo.com

Wallet/Recurring Information

Customer ID:	39280482394
Wallet ID:	4848478775
Recurring ID:	66637373344
Payment Description:	John's Visa
Payment Frequency:	Monthly
Number of Payments:	12
Recurring Start Date:	1/1/2012

[continue](#) [print](#)



Sample Partially Approved Receipt

Be sure to print this transaction receipt for your records.

[continue](#) [print](#)

<p>Test Merchant 12202 Airport Way, Suite 100 Broomfield, CO 80021 303-625-8000</p> <p>Partially Approved</p> <p>Date 12/2/11 13:26 PDT Transaction ID: 310681 Ref ID: Account: *****9539 Auth: 27919B Amount \$1.30 Amount Due: \$.65</p> <p>Signature: _____</p> <p>I, Test Customer, agree to pay the above amount according to the card issuer agreement. (Merchant agreement if credit voucher)</p> <p>Thank You!</p>	<p>Billing Information</p> <p>Test Customer 470 Emerald Ave San Carlos, CA 94070 510-555-0000 jsmith@yahoo.com</p> <p>Wallet/Recurring Information</p> <p>Customer ID: 39280482394 Wallet ID: 4848478775 Recurring ID: 66637373344 Payment Description: John's Visa Payment Frequency: Monthly Number of Payments: 12 Recurring Start Date: 1/1/2012</p>
--	--

[continue](#) [print](#)

**Sample response post string for sale:**

```
<ResponseModel xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <CustomerReferenceID>INV001</CustomerReferenceID>
  <rspCode>00</rspCode>
  <AddressLine1>101 1st Street</AddressLine1>
  <AddressLine2 />
  <City>New York</City>
  <State>NY</State>
  <Email />
  <TranNr>19049331</TranNr>
  <Auth>Lexc05</Auth>
  <Amount>000000000131</Amount>
  <Zip>90909</Zip>
  <Phone />
  <SwchKey>0A10092D154C00893369A9B457F00C</SwchKey>
  <ACI>Y</ACI>
  <STAN>009250</STAN>
  <CardType>1</CardType>
  <mapCAID>300979940268000</mapCAID>
  <IndCode>2</IndCode>
  <PmtType>CC</PmtType>
  <Date>2016-05-17T11:44:28.000</Date>
  <AccountHoldername>First Last</AccountHoldername>
</ResponseModel>
```

Sample response post string for recurring:

```
<ResponseModel xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <RecurrID>1463511976129197436</RecurrID>
  <PmtID>1463511976098134908</PmtID>
  <CustomerReferenceID>INV004</CustomerReferenceID>
  <rspCode>00</rspCode>
  <RecurrRsp>00</RecurrRsp>
  <CustID>1463511976082123656</CustID>
  <PaymentFrequency>Monthly</PaymentFrequency>
  <AddressLine1/>
```



```
<AddressLine2/>
<City/>
<State/>
<Email/>
<TranNr>19049811</TranNr>
<Auth>Lexc05</Auth>
<Amount>000000000131</Amount>
<Zip/>
<Phone/>
<RecurringAmount>1.31</RecurringAmount>
<SwchKey>0A100933154C01C868FACC83712EBB</SwchKey>
<ACI>Y</ACI>
<STAN>009298</STAN>
<CardType>1</CardType>
<mapCAID>300979940268000</mapCAID>
<NumberOfPayments>12</NumberOfPayments>
<IndCode>2</IndCode>
<StartDate>05-31-2016</StartDate>
<PmtType>CC</PmtType>
<Date>2016-05-17T12:06:15.000</Date>
<AccountHoldername>First Last</AccountHoldername>
</ResponseModel>
```



3 Post Integration Method

This functions described in this section are used for sending standard POS transactions (such as sales, voids, credits) via an HTTPS Post connection. Responses are returned as post strings.

Notes:

- As PayPal cards are only allowed on card present transactions, they are not allowed for the Post Integration Method.
- Recurring transactions are not supported in the Post Integration Method

3.1 Credit Card Sale

This function is used to process a credit card sale transaction.

Certification Post URL:

<https://post.cert.transactionexpress.com/PostMerchantService.svc/CreditCardSale>

Production Post URL:

<https://post.transactionexpress.com/PostMerchantService.svc/CreditCardSale>

Element	Type	Description	M/C
GatewayID	ans..15	Merchant Gateway ID	M
RegKey	an..16	Merchant Registration Key	M
IndustryCode	n..4	<p>This is the Industry Code that overrides the merchant profile information for a credit card transaction.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO• 1 = Retail• 2 = eCommerce• 3 = Mobile Payment * Required for card present Master Card Transactions <p>Conditions:</p> <p>If set here, it overrides the value in the merchant profile setting.</p>	C
AccountNumber	n..19	<p>Primary Account Number; this is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe</p> <p>Condition:</p> <ul style="list-style-type: none">• If TrackData is set, then this should not be set	C



Element	Type	Description	M/C
CVV2	n..4	CVV2 or CID security code located on the card Condition: <ul style="list-style-type: none">• If TrackData is set, then this should not be set	C
ExpirationDate	n4, YYMM	Year and month the card expires Conditions: <ul style="list-style-type: none">• If TrackData is set, then this should not be set• If AccountNumber is set, then this is mandatory	C
Track1Data	ans..76	Track 1 data from the magnetic stripe of the card; begin/end sentinels ('%' and '?') must be removed. Conditions: <ul style="list-style-type: none">• If AccountNumber is set, then this should not be set.• If Expiration Date is set, then this should not be set.	C
Track2Data	ans..37	Track 2 data when the card is swiped; begin/end sentinels (';' and '?') must be removed Conditions: <ul style="list-style-type: none">• If AccountNumber is set, then this should not be set.• If Expiration Date is set, then this should not be set.• If Track1Data is present, trk2 is constructed from trk1.	C
Amount	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.	M
TaxIndicator	n1	This indicates whether tax has been assessed and was included in the Amount . Valid Values: <ul style="list-style-type: none">• 0=Nontaxable• 1 = Taxable• 2 = Tax-Exempt Conditions: <ul style="list-style-type: none">• This is required for purchase card transactions. Note: Do not send a value in this field unless you are processing a corporate/purchase/business card transaction.	C



Element	Type	Description	M/C
TaxAmount	n..8	<p>This is the amount of tax collected and included in the Amount.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase/business card transaction.</p>	C
PONumber	ans..22	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card/business transaction and passing tax amount includes tax indicator.</p>	C
ShipToZip	ans..9	<p>This is the ship to zip code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is only applicable/required to AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
CustRefID	ans..50	<p>This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions.</p> <p>Condition:</p> <ul style="list-style-type: none">• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p>	C
FullName	ans..61	This is the customer's full name.	O



Element	Type	Description	M/C
Address1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
Address2	ans..50	This is the customer's street address line 2.	O
City	ans..40	This is the customer's city.	O
State	a2	This is the customer's state. Values must be in all CAPS.	O
Zip	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
PhoneNumber	ans..15	This is the customer's phone number.	O
Email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
Descriptor	ans..25	Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased. If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead	O



Element	Type	Description	M/C
CADCIndicator	n1	<p>Cardholder Authentication Data Collection (CADC) indicator.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 0 = CADC is not supported at the merchant's web site • 1 = CADC is supported by the merchant, but CAVV/UCAF data was not populated • 2 = CADC is supported by the merchant, and CAVV/UCAF data was populated <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C
CAVV	an..40	<p>Cryptographic value that proves Visa cardholder was authenticated. This is in hexadecimal format</p> <p>Conditions:</p> <ul style="list-style-type: none"> • Required for Visa transactions if cadlIndicator = 2 • If set when cadlIndicator = 0 or 1, transaction will be rejected • Only applies for Visa transactions • Optional if indCode=2 ECOM. Only eCommerce transactions may contain Cardholder Authentication data elements. 	C
UCAF	ans..64	<p>Cryptographic value that proves MasterCard cardholder was authenticated. This is in hexadecimal format.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • Required for MasterCard transactions if cadlIndicator = 2 • If set when cadlIndicator = 0 or 1, transaction will be rejected • Only applies for MasterCard transactions <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C
XID	20-byte (160 bit) binary number	<p>Unique tracking number generated by the merchant server to identify the transaction and prevent resubmission/replay. This is in binary format.</p> <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	O
DeviceType	n2	<p>This is the description of the device type.</p> <p>Condition: This field is required for mobile payment processing Master Card transactions.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 00 = Credit Card (default) • 01 = Mobile Phone or Smartphone with Mobile Network 	C



Element	Type	Description	M/C
		<p>Operator (MNO) controlled removable secure element (SIM or UICC)</p> <ul style="list-style-type: none">• 02 = Key Fob• 03 = Watch using a contactless chip or a fixed (non-removable) secure element not controlled by the MNO• 04 = Mobile Tag• 05 = Wristband• 06 = Mobile Phone Case or Sleeve• 07 = Mobile Phone or Smart Phone with a fixed (non-removable) secure element controlled by the MNO (such as CDMA).• 08 = Mobile Phone or Smartphone with removable secure element not controlled by the MNO(such as a personalized SD card).• 09 = Mobile Phone or Smart Phone with a fixed (non-removable) secure element not controlled by the MNO.• 10 = Tablet or E-Book with an MNO controlled removable secure element (SIM or UICC).• 11 = Tablet or E-Book with a fixed (non-removable) secure element not controlled by the MNO.• 12 = Tablet or E-Book with a removable secure element not controlled by the MNO(such as a personalized SD card).• 13 – Tablet or E-Book with a fixed (non-removable) secure element not controlled by the MNO.• 14 = Mobile Phone or Smartphone with a payment application running in a host processor• 15 = Table or E-Book with a payment application running in a host processor• 16 = Mobile Phone or Smartphone with a payment application running in the TEE of a host processor• 17 = Table or E-Book with a payment application running in the TEE of a host processor• 18 = Watch with a payment application running in the TEE of a host process• 19 = Watch with a payment application running in a host processor• 20 = Card• 21 = Phone Mobile phone• 22 = Tablet/e-reader Tablet computer or ereader• 23 = Watch/Wristband Watch or wristband, including a fitness band, smart strap, disposable band, watch add-on, and security/ID band• 24 = Sticker• 25 = PC PC or laptop• 26 = Device Peripheral Mobile phone case or sleeve• 27 = Tag Key fob or mobile tag• 28 = Jewelry Ring, bracelet, necklace, and cuff links• 29 = Fashion Accessory Handbag, bag charm, and glasses• 30 = Garment Dress	



Element	Type	Description	M/C
		<ul style="list-style-type: none">• 31 = Domestic Appliance Refrigerator, washing machine• 32 = Vehicle Vehicle, including vehicle attached devices• 33 = Media/Gaming Device Media or gaming device, including a set top box, media player, and television• 34-99 = These values reserved for future form factors. Any value in this range may occur within form factors and transaction data without prior notice.	
GoodsSoldCode	n4	GoodsSoldCode is required for card present American Express Gift Card Sales. Valid Values: <ul style="list-style-type: none">• 1000 (Gift Card)• None	C

Sample request post string:

GatewayID=77xxxxxxxx
&RegKey=B7XXXXXXXXXXXXXB
&IndustryCode=2
&AccountNumber=4485896261017708
&CVV2=999
&ExpirationDate=1501
&Track1Data=
&Track2Data=
&Amount=100
&TaxIndicator=
&TaxAmount=
&PONumber=
&ShipToZip=123456789
&CustRefID=NewTWZ
&FullName=John Smith
&Address1=450 main
&Address2=suite 100
&City=Broomfield
&State=CO
&Zip=85284
&PhoneNumber=3334445555
&Email=info@xyzhh.com

Sample response post string:



```
ResponseCode=00&tranNr=1237751&PostDate=2011-12-  
07T01:22:40.000&Amount=1000&AmtDueRemaining=0&CardBalance=  
&Auth=TAS721&AVSCode=Y&CVV2Response=M&CAVVResultCode=  
0
```

DO NOT COPY

**Response element mapping:**

Element	Type	Description
ResponseCode	an2	Result of the transaction request. See the Appendix Transaction Response Codes for valid values.
tranNr	n..19	Transaction number.
PostDate	dateTime	Date and time when the transaction is posted.
Amount	n..12	Approved/declined amount of the transaction. <ul style="list-style-type: none">• Note: if ResponseCode =10 this is the partially authorized amount, otherwise this is the request amount.
AmtDueRemaining	n..12	Remaining amount due on a partially authorized transaction <ul style="list-style-type: none">• Note: if ResponseCode = 10 this is the balance due, otherwise this will be zero.
CardBalance	n..12	If applicable, available remaining balance on the card. Applies to partial authorization and balance.
Auth	ans..6	Authorization code received from the issuer.
AVSCode	an1	AVS result code received from the issuer Valid values: See Appendix for AVS Response Codes.
CVV2Response	an1	CVV2/CVC2/CID result code received from the issuer Valid values: See Appendix CVV2 Response Codes.
CAVVResultCode	an1	CAVV result code received from the issuer Valid values: See Appendix CAVV Response Codes.



3.2 Credit Card Void

This function is used to void a previously processed credit card sale transaction. A credit card sale can only be voided if it has not been settled. If the transaction has been settled, a credit refund must be processed to reverse the sale transaction.

Certification Post URL:

<https://post.cert.transactionexpress.com/PostMerchantService.svc/CreditCardVoid>

Production Post URL:

<http://post.transactionexpress.com/PostMerchantService.svc/CreditCardVoid>

Element	Type	Description	M/C
GatewayID	ans..15	Merchant Gateway ID	M
RegKey	an..16	Merchant Registration Key	M
tranNr	n..19	Sale transaction number to void.	M
SuspectFraud	a1	<p>Indicates if transaction is being voided because fraud is suspected.</p> <p>Valid values:</p> <ul style="list-style-type: none">• Y• N <p>Condition:</p> <ul style="list-style-type: none">• Mandatory for MasterCard transactions for which the transaction to be voided was card-not-present (i.e., industry code of original sale = 0 or 2).• Value should NOT be set for card-present MasterCard transactions.• Value should NOT be set for card types other than MasterCard.	C
Email	ans..75	<p>Customer's email address; will be used for sending an email response to the customer if customer email notifications are configured in the TXP Virtual Terminal.</p> <p>Valid special characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O

**Sample request post string:**

```
GatewayID=77xxxxxxxx  
&RegKey=B7XXXXXXXXXXXXX  
&tranNr=00000125468778  
&SuspectFraud=N  
&Email=info@xyzhh.com
```

Sample response post string:

```
ResponseCode=00&tranNr=1237760&PostDate=2011-12-  
07T01:46:40.000&Amount=1000&CardBalance=1000&Auth=TAS723
```

Response element mapping:

Element	Type	Description
ResponseCode	an2	Result of the transaction request. See the appendix Transaction Response Codes for valid values.
tranNr	n..19	Transaction number.
PostDate	dateTime	Date and time when the transaction is posted.
Amount	n..12	Amount of the Void transaction.
CardBalance	n..12	If applicable, available remaining balance on the card.
Auth	ans..6	Authorization code received from the issuer.



3.3 Credit Card Refund

This function is used to process a credit (refund) against a previously settled credit card sale transaction. A credit card sale can only be credited if it has been settled. If the transaction has not been settled, a credit card void must be processed to reverse the sale transaction.

Certification Post URL:

<https://post.cert.transactionexpress.com/PostMerchantService.svc/CreditCardRefund>

Production Post URL:

<https://post.transactionexpress.com/PostMerchantService.svc/CreditCardRefund>

Element	Type	Description	M/C
GatewayID	ans..15	Merchant Gateway ID	M
RegKey	an..16	Merchant Registration Key	M
Amount	n..12	Transaction amount in minor denominations. Note: The amount cannot be greater than the original sale amount.	M
tranNr	n..19	Sale transaction number to void.	M
Email	ans..75	Customer's email address; will be used for sending an email response to the customer if customer email notifications are configured in the TXP Virtual Terminal. Valid special characters: <ul style="list-style-type: none">• .• -• %• +• -• @ Note: A special character cannot be the first character in this field.	O

**Sample request post string:**

```
GatewayID=77xxxxxxxx  
&RegKey=B7XXXXXXXXXXXXXXB  
&Amount=1000  
&tranNr=1212345  
&Email=info@xyzhh.com
```

Sample response post string:

```
ResponseCode=00&transNr=1237820&PostDate=2011-12-  
09T13:42:40.000&Amount=100&CardBalance=200
```

Response element mapping:

Element	Type	Description
ResponseCode	an2	Result of the transaction request. See the appendix Transaction Response Codes for valid values.
tranNr	n..19	Transaction number.
PostDate	dateTime	Date and time when the transaction is posted.
Amount	n..12	Approved/declined amount of the transaction.
CardBalance	n..12	If applicable, available remaining balance on the card.



3.4 Credit Card Refund Void

This function is used to cancel a credit (refund) transaction that has not been settled.

Certification Post URL:

<https://post.cert.transactionexpress.com/PostMerchantService.svc/CreditCardRefundVoid>

Production Post URL:

<https://post.transactionexpress.com/PostMerchantService.svc/CreditCardRefundVoid>

Element	Type	Description	M/C
GatewayID	ans..15	Merchant Gateway ID	M
RegKey	an..16	Merchant Registration Key	M
tranNr	n..19	Sale transaction number to void.	M
Email	ans..75	<p>Customer's email address; will be used for sending an email response to the customer if customer email notifications are configured in the TXP Virtual Terminal.</p> <p>Valid special characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O

**Sample request post string:**

```
GatewayID=77xxxxxxxx  
&RegKey=B7XXXXXXXXXXXXX  
&tranNr=1212345  
&Email=info@xyzhh.com
```

Sample response post string:

```
ResponseCode=00&tranNr=1237825&PostDate=2011-12-  
09T13:58:42.000&Amount=100&CardBalance=
```

Response element mapping:

Element	Type	Description
ResponseCode	an2	Result of the transaction request. See the appendix Transaction Response Codes for valid values.
tranNr	n..19	Transaction number.
PostDate	dateTime	Date and time when the transaction is posted.
Amount	n..12	Approved/declined amount of the transaction.
CardBalance	n..12	If applicable, available remaining balance on the card.



3.5 ACH Sale

This function is used to process an ACH sale transaction.

Certification Post URL:

<https://post.cert.transactionexpress.com/PostMerchantService.svc/ACHSale>

Production Post URL:

<https://post.transactionexpress.com/PostMerchantService.svc/ACHSale>

Element	Type	Description	M/C
GatewayID	ans..15	Merchant Gateway ID	M
RegKey	an..16	Merchant Registration Key	M
SecCode	n1	SEC Code for the individual transaction. Valid values: <ul style="list-style-type: none">• 0 = Telephone (TEL)• 1 = Internet (WEB)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD)	M
AccountNumber	n..17	Customer's checking account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.	M
RoutingNumber	n..9	Routing number of customer's bank.	M
Descriptor	ans..10	ACH descriptor for ACH only. Default from Merchant Profile.	O
Amount	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.	M
CustRefID	ans..50	Merchant's Customer Reference ID.	C
FullName	ans..50	This is the customer's full name.	M
Address1	ans..50	This is the customer's street address line 1. Conditions: <ul style="list-style-type: none">• Mandatory if merchant is set up for fraud check.• Optional if merchant is not set up for fraud check.	C
Address2	ans..50	This is the customer's street address line 2.	O



Element	Type	Description	M/C
City	ans..40	<p>This is the customer's city.</p> <p>Condition:</p> <ul style="list-style-type: none">• Mandatory if merchant is set up for fraud check.• Optional if merchant is not set up for fraud check.	C
State	a2	<p>This is the customer's state. Values must be in all CAPS.</p> <p>Condition:</p> <ul style="list-style-type: none">• Mandatory if merchant is set up for fraud check.• Optional if merchant is not set up for fraud check.	C
Zip	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• Mandatory if merchant is set up for fraud check.• Optional if merchant is not set up for fraud check. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
PhoneNumber	ans..15	<p>This is the customer's phone number.</p> <p>Condition:</p> <ul style="list-style-type: none">• Mandatory if merchant is set up for fraud check. <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	C
Email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O

**Sample response post string:**

```
GatewayID=77xxxxxxxx  
&RegKey=B7XXXXXXXXXXXXXXB  
&SecCode=1  
&AccountNumber=123456780  
&RoutingNumber=123456780  
&Descriptor=  
&Amount=1000  
&CustRefID=custrefid val  
&FullName=John Smith  
&Address1=450 main  
&Address2=  
&City=city  
&State=CO  
&Zip=12311  
&PhoneNumber=  
&Email=
```

Sample response post string:

```
ResponseCode=0&tranNr=1237753&PostDate=2011-12-  
07T01:22:40.000&Amount=995&Message=Transaction+Processed
```

Response element mapping:

Element	Type	Description
ResponseCode	an2	Result of the transaction request based on the "Severity" response element returned by Check Gateway. Valid values: <ul style="list-style-type: none">• 0 = Accepted.• All other codes = Declined.
tranNr	n..19	Transaction number.
PostDate	dateTime	Date and time when the transaction is posted.
Amount	n..12	Approved/declined amount of the transaction.
Message	ans1024	User friendly outcome of the request; in the case of declined transactions, this element will provide information about the error.



3.6 ACH Refund/Void

This function is used to refund or void a previously processed ACH sale transaction. If the ACH sale transaction has not yet settled, a void will occur. If the ACH sale transaction has already settled, a full refund will occur.

Certification Post URL:

<https://post.cert.transactionexpress.com/PostMerchantService.svc/ACHRefundOrVoid>

Production Post URL:

<https://post.transactionexpress.com/PostMerchantService.svc/ACHRefundOrVoid>

Element	Type	Description	M/C
GatewayID	ans..15	Merchant Gateway ID	M
RegKey	an..16	Merchant Registration Key	M
tranNr	n..19	Transaction Number of sale to refund or void.	C
Email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O

**Sample request post string:**

```
GatewayID=77xxxxxxxx  
&RegKey=B7XXXXXXXXXXXXXXB  
&tranNr=99123456  
&Email=info@xyzhh.com
```

Sample response post string:

```
ResponseCode=0&tranNr=1237753&PostDate=2011-12-  
07T01:27:35.000&Amount=995&Message=Transaction+Processed
```

Response element mapping:

Element	Type	Description
ResponseCode	an2	<p>Result of the transaction request based on the "Severity" response element returned by Check Gateway.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Accepted• All other codes = Declined
tranNr	n..19	Transaction number.
PostDate	dateTime	Date and time when the transaction is posted.
Amount	n..12	Approved/declined amount of the transaction.
Message	ans1024	Human-readable outcome of the request; in the case of declined transactions, this element will provide information about the error.



3.7 Transaction Status

This function is used to check a single transaction's status. If multiple records are found, an error will be returned. Since CustRefID (customer reference ID) is not required to be a unique value (and may therefore be shared across multiple transaction records), Status Requests using CustRefID must also include PostDate and Amount in order to minimize the likelihood of multiple records matching the search criteria.

Certification Post URL:

<https://post.cert.transactionexpress.com/PostMerchantService.svc/TransactionStatus>

Production Post URL:

<https://post.transactionexpress.com/PostMerchantService.svc/TransactionStatus>

Element	Type	Description	M/C
GatewayID	ans..15	Merchant Gateway ID	M
RegKey	an..16	Merchant Registration Key	M
tranNr	n..19	Transaction Number of sale. Conditions: <ul style="list-style-type: none">• Either TransID OR CustRefID is mandatory.• If TransID is set, CustRefID and Amount must NOT be set.• If CustRefID is set, TransID must NOT be set.	C
CustRefID	ans..50	Merchant's Customer Reference ID. Conditions: <ul style="list-style-type: none">• Either CustRefID OR TransID is mandatory.• If CustRefID is set, TransID must NOT be set.• If CustRefID is set, Amount MUST be set.• If TransID is set, CustRefID must not be set.	C
PostDate	an..10	Posted Date of the transaction. Valid format: <ul style="list-style-type: none">• MMDDYYYY	M
Amount	an..8	Transaction amount in minor denominations. Conditions: <ul style="list-style-type: none">• Mandatory if CustRefID is set.• If TransID is set, Amount must NOT be set.	C

**Sample request post strings:**

```
GatewayID=77xxxxxxxx  
&RegKey=B7XXXXXXXXXXXXXXB  
&tranNr=98812345  
&CustRefID=  
&PostDate=06022014  
&Amount=
```

Sample response post strings:

Scenario	Example Response Post String
Improper data sent in the request. <ul style="list-style-type: none">Example: both tranNr and Amount sent together.	tranNr=&CustRefID=&Auth=&Status=&Message=Invalid+Request
Requested record not found.	tranNr=&CustRefID=&Auth=&Status=&Message>No+Records+Found
Multiple records match input parameters. <ul style="list-style-type: none">Note: method will only return a single record.	tranNr=&CustRefID=&Auth=&Status=&Message=Too+Many+Records+Found
Requested record retrieved successfully.	tranNr=1237754&CustRefID=Bat+Computer+Maint&Auth=TAS725&Status=Settled&Message=Approved+or+completed+successfully

Response element mapping:

Element	Type	Description
tranNr	n..19	Transaction number. Conditions: <ul style="list-style-type: none">Value returned only if record successfully retrieved.
CustRefID	ans..50	Merchant's Customer Reference ID Conditions: <ul style="list-style-type: none">Value returned only if record successfully retrieved.
Auth	an..6	Authorization code received from the issuer. Conditions: <ul style="list-style-type: none">Value returned only if record successfully retrieved.Value returned only for Credit Card or Purchase Card transactions.



Status	ans..100	Transaction status. Conditions: <ul style="list-style-type: none">• Value returned only if record successfully retrieved.
Message	ans..1024	Human-readable response message or status description if record is successfully retrieved, otherwise “unsuccessful request” message. Valid “unsuccessful request” messages: <ul style="list-style-type: none">• “Invalid Request”• “No Records Found”• “Too Many Records Found”



4 Credit Card Web Services

The web service calls in this section are used for sending standard POS transactions (such as auth only, auth and settle, settle only) using the SendTran method of the Merchant Web Service.

Note: The Point 2 Point Encryption (P2Pe) fields are available in the SendTranP2pe call.

4.1 Sale (with mandatory fields)

This transaction is used to perform authorization and settlement in a single request, using mandatory fields only.

This transaction can return a partial authorization. The response code for a partial authorization is 10, and there is an amount field in the additional Amount section of the JSON Response. This amount field contains the value of the original amount. An example of the JSON Response for a partial authorization follows the JSON Response for a completed transaction.

NOTE: Fields with an ^ (pos.termld) are required for device-based transactions (Ex: VeriFone, PAX, etc.).

Element	Type	Description	M
merc.id	ans..15	15-Digit Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 1 = Auth & Settle	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.	M
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M



reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
^pos.termlId	n4	The 4-digit terminal ID. This is used to construct the Terminal ID field. *Required for device-initiated transactions.	M

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 1,  
  "card": {  
    "pan": "4485896261017708",  
    "xprDt": "2012",  
  },  
  "reqAmt": "130",  
  "pos": {  
    "termlId": "0001"  
  }  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {  
    "tranId": "000000000002824",  
    "valCode": "VICK"  
  },  
  "tranData": {  
    "swchKey": "0AFF0E7015454AC65B758E22238159",  
    "tranNr": "000011143391",  
    "dtTm": "/Date(1461709465000-0700)/",  
    "amt": "00000000130",  
    "stan": "001071",  
    "auth": "TAS854"  
  },  
  "cardType": "0",  
}
```



```
"mapCaid": "323004201000000",
"merc": {
  "id": "9000",
  "inType": 1
}
}
```

Example Response for a Partial Authorization:

```
{
  "rspCode": "10",
  "rspCodeMsg": "Approved, partial",
  "authRsp": {
    "aci": "N",
    "tranId": "000000000001802",
    "valCode": "NA "
  },
  "tranData": {
    "swchKey": "0AFF0E701544F1535D5EDCA9357490",
    "tranNr": "000011141221",
    "dtTm": "/Date(1461615670000-0700)/",
    "amt": "00000000555",
    "stan": "001068",
    "auth": "TAS013"
  },
  "cardType": "0",
  "mapCaid": "323004201000000",
  "additionalAmount": [
    {
      "accountType": "Item00",
      "amountType": "Item57",
      "currencyCode": "840",
      "amountSign": "C",
      "amount": "000000001110"
    }
  ],
  "merc": {
    "id": "9000",
    "inType": 1
}
}
```



Example Response for a Declined Transaction:

```
{  
    "rspCode": "01",  
    "rspCodeMsg": "Refer to card issuer",  
    "authRsp": {  
        "aci": "N",  
        "tranId": "000000000002825",  
        "valCode": "NA "  
    },  
    "tranData": {  
        "swchKey": "0AFF0E7015454AED7900BCDB8D6D5E",  
        "tranNr": "000011143401",  
        "dtTm": "/Date(1461709625000-0700)/",  
        "amt": "000000000001",  
        "stan": "001072"  
    },  
    "cardType": "0",  
    "mapCaid": "323004201000000",  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```

DO NOT COPY



4.2 Sale (with conditional and optional fields)

This transaction is used to perform authorization and settlement in a single request, using conditional and optional fields.

This transaction can return a partial authorization. The response code for a partial authorization is 10, and there is an amount field in the additionalAmount section of the JSON Response. This amount field contains the value of the original amount. An example of the JSON Response for a partial authorization follows the JSON Response for a completed transaction.

NOTE: Fields with an * are to be utilized for Card Holder Authentication purposes.

NOTE: Fields with an ^ (pos.termld) are required for device-based transactions (Ex: VeriFone, PAX, etc.).

Element	Type	Description	M/C/O
KSN	an..20	<p>Key serial number (= Initial key serial number + Encryption counter) supplied by pin pad</p> <p>Condition:</p> <ul style="list-style-type: none">• Uses SendTranP2pe• KSN is in Bytes• Required for P2PE	C
FormatCode	n2	<p>The identification of the reader that is making the request i.e., anywhere commerce</p> <p>Valid Value:</p> <ul style="list-style-type: none">• 38 <p>Condition:</p> <ul style="list-style-type: none">• Uses SendTranP2pe• Required for P2PE	C
merc.id	ans..15	15-Digit Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Merchant Web Service	M



merc.prodType	n1	<p>Product Type: This is the product type for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 5 = Credit/Debit Card (Default)	O
tranCode	n..2	<p>Transaction Code: This indicates the type of transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Auth & Settle	M
card.EncryptPAN	ans..(no limit of characters applies to this field)	<p>This field contains the encrypted PAN used in the transaction.</p> <p>Condition:</p> <ul style="list-style-type: none">• Required for P2PE• Uses SendTranP2pe• Swiped (encrypt card.trk1 or card.trk2 or both)• In addition to the emvTlvReq field, EMV transactions are required to include the trk 2 data read from the chip in this field. <p>Note: If the cleartext does not satisfy the block size (e.g., 8 bytes for 3DES), then it must be padded with hex FF on the right-hand side before encrypting it. For example, if the clear text is [30 31 32 33 34 35 36 37 38 39] (10 bytes) and the block size is 8 bytes, then it must be padded with hex FF before encrypting it like so: [30 31 32 33 34 35 36 37 38 39 FF FF FF FF FF FF] (this is 16 bytes, which is divisible by 8 (i.e., block size)).</p>	C
card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <ul style="list-style-type: none">• Do Not Pass this field when using P2PE with card.EncryptPan data field.	M
card.sec	n..4	CVV2/CVC2/CID: This is the 3- or 4-digit card verification code located on the card.	O
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M



card.trk1	variable length 1 byte, binary + up to 76 ANSI, EBCDIC; maximum 77 bytes	Track Data: This is the track 1 data obtained from the magnetic stripe of the card. Track 1 and/or track 2 required for card present/swipe transactions. All characters must be upper case including format code. indCode must = 1 for retail. Conditions: <ul style="list-style-type: none">• If AccountNumber is set, then this should not be set.• If Expiration Date is set, then this should not be set. Note: Starting and ending sentinels must be removed. For track 1, this includes the "%" and "?" symbols.	C
card.trk2	variable length 1 byte, binary + up to 37 N, 4-bit BCD	Track Data: This is the track 2 data obtained from the magnetic stripe of the card. Track 1 and/or track 2 required for card present/swipe transactions. All characters must be upper case including format code. indCode must = 1 for retail. Conditions: <ul style="list-style-type: none">• If AccountNumber is set, then this should not be set.• If Expiration Date is set, then this should not be set.• If Track1Data is present, trk2 is constructed from trk1. Note: Starting and ending sentinels must be removed. For track 2, this includes the ";" and "?" symbols.	C
card.dbtOrCdt	n1	This indicates whether the card is a debit or credit card. Valid Values: <ul style="list-style-type: none">• 1 = Credit	O



card.cardInputType	n1	<p>Contains information related to the EMV card input type:</p> <p>Valid values:</p> <ul style="list-style-type: none">0 = Normal (non-EMV magstripe or keyed)1 = EMV chip2 = EMV contactless3 = EMV fallback4 = Contactless swiped5 = Tokenized (Apple Pay, Samsung Pay, etc.)6 = Dual Interface (Discover only) <p>Condition:</p> <p>If the transaction is Chip/Contactless this data must be provided or the transaction will not be processed as such regardless of the data present in the emvTlvReq field.</p> <p>Note:</p> <p>If this is not set, then Normal (0) is assumed.</p>	C
contact.fullName	ans..61	<p>This is the customer's full name.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is only applicable in the SendTran, UpdtRecurrProf, and FndRecurrProf web service functions.	C
contact.coName	ans..30	This is the customer's company name.	O
contact.title	as..10	<p>This is the customer's title.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field.</p>	O



contact.phone.type	n1	<p>This is the type of customer phone number.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a contact phone number is provided.	C
contact.phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	O
contact.addrLn1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
contact.addrLn2	ans..50	This is the customer's street address line 2.	O
contact.city	ans..40	This is the customer's city.	O
contact.state	a2	This is the customer's state. Values must be in all CAPS.	O



contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
contact.ctry	a2	This is the customer's country. The only permitted value is US.	O
contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• @ <p>Note: A special character cannot be the first character in this field.</p>	O
contact.ship.fullName	ans..61	This is the customer's full name for shipping purposes.	O
contact.ship.addrLn1	ans..50	This is the shipping street address line 1.	O
contact.ship.addrLn2	ans..50	This is the shipping street address line 2.	O
contact.ship.city	ans..40	This is the shipping city.	O
contact.ship.state	a2	This is the shipping state. Values must be in all CAPS.	O
contact.ship.zipCode	ans..9	<p>This is the shipping ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O
contact.ship.phone	ans..12	<p>This is the shipping phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	O



contact.ship.email	ans..75	<p>This is the shipping email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• @ <p>Note: A special character cannot be the first character in this field.</p>	O
reqAmt	n..8	<p>This contains the amount associated with this transaction in minor denominations.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef.name	ans..50	<p>This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call. Note: There are a total of 5 user defined fields that can be used per gateway id.</p> <p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef.val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
^pos.termlId	n4	The 4-digit terminal ID. This is used to construct the Terminal ID field. *Required for device-initiated transactions.	M
pos.pmtDesc	ans..25	Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead	O



indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO• 1 = Retail• 2 = eCommerce• 3 = Mobile Payment	C
tranFlags.dupChkTmPrd	n..7	<p>This indicates the window of time in seconds after a transaction is submitted during which you can override the duplicate settings set in the TXP account.</p>	O
tranFlags.convFeeAcptd	a1	<p>RESERVED FOR FUTURE USE</p> <p>This indicates whether or not a convenience fee was presented and accepted by the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• Y = Yes• N = No <p>Conditions:</p> <ul style="list-style-type: none">• When the merchant account is configured for a convenience fee, the convenience fee flag must be set to Y for all transactions.• If the merchant is not configured for convenience fee support, then this field is ignored.• If this is set to N, then no convenience fee was applied.• If this is set to Y, then a convenience fee was applied.	C
authReq.xid(*)	20-byte (160 bit) binary number	<p>Unique tracking number generated by the merchant server to identify the transaction and prevent resubmission/replay. This is in binary format.</p> <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	O



authReq.cavv(*)	an..40	<p>Cryptographic value that proves Visa cardholder was authenticated. This is in hexadecimal format</p> <p>Conditions:</p> <ul style="list-style-type: none">Required for Visa transactions if cadcIndicator = 2If set when cadcIndicator = 0 or 1, transaction will be rejectedOnly applies for Visa transactionsOptional if indCode=2 ECOM. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ucafldcr(*)	n1	<p>Cardholder Authentication Data Collection (CADC) indicator.</p> <p>Valid Values:</p> <ul style="list-style-type: none">0 = CADC is not supported at the merchant's web site1 = CADC is supported by the merchant, but CAVV/UCAF data was not populated2 = CADC is supported by the merchant, and CAVV/UCAF data was populated <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C
authReq.ucaf(*)	an..64	<p>Cryptographic value that proves MasterCard cardholder was authenticated. This is in hexadecimal format.</p> <p>Conditions:</p> <ul style="list-style-type: none">Required for MasterCard transactions if cadcIndicator = 2If set when cadcIndicator = 0 or 1, transaction will be rejectedOnly applies for MasterCard transactions <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C



authReq.purcCard.mercOrdNr	ans..17	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction and passing tax amount includes tax indicator.</p>	C
authReq.purcCard.billShip.type	n1	<p>This is the ShipToZipCode type.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 3 = Ship to <p>Conditions:</p> <ul style="list-style-type: none">• This element is only applicable to AMEX transactions when shipping products to the cardholder. <p>Note: A default type of 3 is set if the type is not provided.</p>	C
authReq.purcCard.billShip.conta ct.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is only applicable/required to AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
authReq.ordNr	ans..50	<p>This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions.</p> <p>Condition:</p> <ul style="list-style-type: none">• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p>	C



authReq.pin	an16	<p>This is the encrypted PIN data in hexadecimal format. (8 byte binary)</p> <p>Condition:</p> <p>PIN Debit (not supported currently) EMV with Online PIN Cardholder Verification Method (CVM)</p>	C
authReq.securityinfo	an96	<p>This is the Security Related Control Information (Iso8583 Field 53) in hexadecimal format. (48 byte binary)</p> <p>This field should be right padded with binary zeros to 48 bytes.</p> <p>Condition:</p> <p>Required for PIN transactions.</p>	C
pmtFreq	n1	<p>Represents the frequency the cardholder is to be charged.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Instalment• 1 = Recurring <p>Condition:</p> <p>This field and the additional dependent fields identify the sale transaction as a recurring payment or installment payment. Pass these fields when the recurring or installment data and payments are managed internally within the business.</p> <p>Note: If you are using the TXP recurring engine (recurring webservices, hosted or virtual terminal)Do not pass these fields as the data is stored in TXP and the appropriate recurring indicators are sent by the TXP platform.</p>	C



initRecurPmtIdcr	n1	<p>This indicates whether the Recurring Payment is the first or subsequent payment</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Initial• 1 = Subsequent <p>Condition:</p> <ul style="list-style-type: none">• If pmtFreq is set to 1, then this is mandatory	C
pmtNr	n..2	<p>This is the current payment number that the cardholder is being charged.</p> <p>Condition:</p> <ul style="list-style-type: none">• If pmtFreq is set to 0, then this is mandatory	C
nrOfPmt	n..2	<p>This is the total number of payments the cardholder will be charged.</p> <ul style="list-style-type: none">• If pmtFreq is set to 0, then this is mandatory	C
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Nontaxable• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions. <p>Note:</p> <ul style="list-style-type: none">• Do not send this field unless you are processing a corporate/purchase card transaction.• Do Not Pass the Tax amount field when using values 0 and 2.	C



tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
deviceType	n2	<p>This is the description of the device type.</p> <p>Condition: This field is required for Master Card PayPass (Contactless) transactions.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 00 = Card(default)• 01 = Mobile Phone or Smartphone with Mobile Network Operator (MNO) controlled removeable secure element (SIM or UICC)• 02 = Key Fob• 03 = Watch using a contactless chip or a fixed (non-removeable) secure element not controlled by the MNO• 04 = Mobile Tag• 05 = Wristband• 06 = Mobile Phone Case or Sleeve• 07 = Mobile Phone or Smart Phone with a fixed (non-removeable) secure element controlled by the MNO (such as CDMA).• 08 = Mobile Phone or Smartphone with removeable secure element not controlled by the MNO(such as a personalized SD card).• 09 = Mobile Phone or Smart Phone with a fixed (non-removeable) secure element not controlled by the MNO.• 10 = Tablet or E-Book with an MNO controlled removeable secure element (SIM or UICC).• 11 = Tablet or E-Book with a fixed (non-removeable) secure element not controlled by the MNO.• 12 = Tablet or E-Book with a removeable secure element not controlled by the MNO(such as a personalized SD card).• 13 – Tablet or E-Book with a fixed (non-removeable) secure element not controlled by the MNO.• 14 = Mobile Phone or Smartphone with a payment application running in a host	C



		<p>processor</p> <ul style="list-style-type: none">• 15 = Table or E-Book with a payment application running in a host processor• 16 = Mobile Phone or Smartphone with a payment application running in the TEE of a host processor• 17 = Table or E-Book with a payment application running in the TEE of a host processor• 18 = Watch with a payment application running in the TEE of a host process• 19 = Watch with a payment application running in a host processor• 20 = Card• 21 = Phone Mobile phone• 22 = Tablet/e-reader Tablet computer or ereader• 23 = Watch/Wristband Watch or wristband, including a fitness band, smart strap, disposable band, watch add-on, and security/ID band• 24 = Sticker• 25 = PC PC or laptop• 26 = Device Peripheral Mobile phone case or sleeve• 27 = Tag Key fob or mobile tag• 28 = Jewelry Ring, bracelet, necklace, and cuff links• 29 = Fashion Accessory Handbag, bag charm, and glasses• 30 = Garment Dress• 31 = Domestic Appliance Refrigerator, washing machine• 32 = Vehicle Vehicle, including vehicle attached devices• 33 = Media/Gaming Device Media or gaming device, including a set top box, media player, and television• 34-99 = These values reserved for future form factors. Any value in this range may occur within form factors and transaction data without prior notice.	
goodsSoldCode	n4	<p>GoodsSoldCode is required for card present American Express Gift Card Sales.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1000 (Gift Card)• None	C



emvTlvReq	an..255	<p>EMV data for the request message encoded as BER-TLV (Basic Encoding Rules – Tag Length Value), in hexadecimal binary representation. Most data sent to and received from an EMV chip is encoded according to BER-TLV.</p> <p>Condition:</p> <ul style="list-style-type: none">• Required for EMV• Track	C
-----------	---------	---	---

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 1,  
  "card": {  
    "pan": "4485896261017708",  
    "sec": "998",  
    "xprDt": "2012",  
    "cardInputType": "0",  
  },  
  "contact": {  
    "fullName": "John Doe",  
    "phone": [  
      {  
        "type": 3,  
        "nr": 5551114444,  
      },  
    ],  
    "addrLn1": "123 Test ST",  
    "city": "Denver",  
    "state": "CO",  
    "zipCode": "80021",  
    "email": "info@email.com",  
    "ship": {  
      "addrLn1": "Jane Doe",  
      "addrLn2": "123 Main St",  
      "city": "Denver",  
      "state": "CO",  
      "zipCode": "80021",  
      "phone": "3037779899",  
    }  
  }  
}
```



```
        "email": "support@email.com",
    },
},
"reqAmt": "130",
"usrDef": [
{
    "name": "TestInvoice",
    "val": "PO741",
},
],
"pos": {
    "termId": "0002",
    "pmtDesc": "pmtDesc value"
},
"indCode": 1,
"authReq": {
    "ordNr": "Invoice ID",
    "pin": " NO Sample Value Available",
    "securityinfo": " NO Sample Value Available",
},
"emvTlvReq": "NO Sample Value Available",
}
```

Example Response:

```
{
    "rspCode": "00",
    "rspCodeMsg": "Approved or completed successfully",
    "authRsp": {
        "tranId": "000000000002824",
        "valCode": "VICK"
    },
    "tranData": {
        "swchKey": "0AFF0E7015454AC65B758E22238159",
        "tranNr": "000011143391",
        "dtTm": "/Date(1461709465000-0700)/",
        "amt": "000000000130",
        "stan": "001071",
        "auth": "TAS854"
    },
    "cardType": "0",
    "mapCaid": "323004201000000",
    "merc": {
        "id": "9000",
        "inType": 1
    }
}
```

**Example Response for a Partial Authorization:**

```
{  
    "rspCode": "10",  
    "rspCodeMsg": "Approved, partial",  
    "authRsp": {  
        "aci": "N",  
        "tranId": "000000000001802",  
        "valCode": "NA "  
    },  
    "tranData": {  
        "swchKey": "0AFF0E701544F1535D5EDCA9357490",  
        "tranNr": "000011141221",  
        "dtTm": "/Date(1461615670000-0700)/",  
        "amt": "000000000555",  
        "stan": "001068",  
        "auth": "TAS013"  
    },  
    "cardType": "0",  
    "mapCaid": "323004201000000",  
    "additionalAmount": [ {  
        "accountType": "Item00",  
        "amountType": "Item57",  
        "currencyCode": "840",  
        "amountSign": "C",  
        "amount": "000000001110"  
    }],  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```

Example Response for a Declined Transaction:

```
{  
    "rspCode": "01",  
    "rspCodeMsg": "Refer to card issuer",  
    "authRsp": {  
        "aci": "N",  
        "tranId": "000000000002825",  
        "valCode": "NA "  
    },  
    "tranData": {  
        "swchKey": "0AFF0E7015454AED7900BCDB8D6D5E",  
        "tranNr": "000011143401",  
        "dtTm": "/Date(1461709625000-0700)/",  
        "amt": "000000000001",  
        "status": "01"  
    }  
}
```



```
        "stan": "001072"
    },
    "cardType": "0",
    "mapCaid": "323004201000000",
    "merc": {
        "id": "9000",
        "inType": 1
    }
}
```

Example SendTranP2pe Transaction Request:

```
{
    "KSN": "FXXXXXXXXXXXXXXXXXXXXX",
    "FormatCode": "38",
    "merc": {
        "id": "XXXXXXXXXX",
        "regKey": "XXXXXXXXXXXXXXXXXX",
        "inType": 1
    },
    "tranCode": 1,
    "card": {
        "EncryptPAN": "9AXXXXXXXXXXXXXXXXXXXXXXXXXXXXX",
        "cardInputType": 1
    },
    "reqAmt": "02350",
    "pos": {
        "termId": "0001"
    },
    "indCode": 1,
    "authReq": {
        "ordNr": "Front Desk-Day"
    },
    "emvTlvReq": "8202XXXX9505XXXXXXXXXX9A03XXXXXX9B..."
}
```

Example SendTranP2pe Transaction Response:

```
{
    "rspCode": "00",
    "rspCodeMsg": "Approved or completed successfully",
    "authRsp": {
        "aci": "N",
        "tranId": "000000000000225",
        "valCode": "5V65"
    },
    "tranData": {

```



```
"swchKey": "0AFA692315117D6F1FA05E3389D5EE",
"tranNr": "000039049941",
"dtTm": "/Date(1447803941000-0800)/",
"amt": "000000001544",
"stan": "000127",
"auth": "TAS119"
},
"cardType": "0",
"mapCaid": "555540492900000"
}
```

DONOTCOPY



4.3 Auth Only (with mandatory fields)

This transaction is used to perform an authorization only, using mandatory fields only. The transaction does not automatically settle. To include this transaction for settlement, an additional Settle Only request must be submitted.

This transaction can return a partial authorization. The response code for a partial authorization is 10, and there is an amount field in the additionalAmount section of the JSON Response. This amount field contains the value of the original amount. An example of the JSON Response for a partial authorization follows the JSON Response for a completed transaction.

NOTE: Fields with an ^ (pos.termld) are required for device-based transactions (Ex: VeriFone, PAX, etc.).

Element	Type	Description	M
merc.id	ans..15	15-Digit Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 0 = Auth Only	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.	M
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M



^pos.terminalId	n4	The 4-digit terminal ID. This is used to construct the Terminal ID field. *Required for device-initiated transactions.	M
-----------------	----	---	---

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 1,  
  "card": {  
    "pan": "4485896261017708",  
    "xprDt": "2012",  
  },  
  "reqAmt": "130",  
  "pos": {  
    "termId": "0001"  
  },  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {  
    "tranId": "000000000002824",  
    "valCode": "VICK"  
  },  
  "tranData": {  
    "swchKey": "0AFF0E7015454AC65B758E22238159",  
    "tranNr": "000011143391",  
    "dtTm": "/Date(1461709465000-0700)/",  
    "amt": "00000000130",  
    "stan": "001071",  
    "auth": "TAS854"  
  },  
  "cardType": "0",  
  "mapCaid": "323004201000000",  
  "merc": {  
    "id": "9000",  
    "inType": 1  
  }  
}
```



Example Response for a Partial Authorization:

```
{  
    "rspCode": "10",  
    "rspCodeMsg": "Approved, partial",  
    "authRsp": {  
        "aci": "N",  
        "tranId": "000000000001802",  
        "valCode": "NA "  
    },  
    "tranData": {  
        "swchKey": "0AFF0E701544F1535D5EDCA9357490",  
        "tranNr": "000011141221",  
        "dtTm": "/Date(1461615670000-0700)/",  
        "amt": "000000000555",  
        "stan": "001068",  
        "auth": "TAS013"  
    },  
    "cardType": "0",  
    "mapCaid": "323004201000000",  
    "additionalAmount": [ {  
        "accountType": "Item00",  
        "amountType": "Item57",  
        "currencyCode": "840",  
        "amountSign": "C",  
        "amount": "000000001110"  
    }],  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```



Example Response for a Declined Transaction:

```
{ {  
    "rspCode": "01",  
    "rspCodeMsg": "Refer to card issuer",  
    "authRsp": {  
        "aci": "N",  
        "tranId": "000000000002825",  
        "valCode": "NA "  
    },  
    "tranData": {  
        "swchKey": "0AFF0E7015454AED7900BCDB8D6D5E",  
        "tranNr": "000011143401",  
        "dtTm": "/Date(1461709625000-0700)/",  
        "amt": "000000000001",  
        "stan": "001072"  
    },  
    "cardType": "0",  
    "mapCaid": "323004201000000",  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```

DO NOT COPY



4.4 Auth Only (with conditional and optional fields)

This transaction is used to perform an authorization only, using conditional and optional fields. The transaction does not automatically settle. To include this transaction for settlement, an additional Settle Only request must be submitted.

This transaction can return a partial authorization. The response code for a partial authorization is 10, and there is an amount field in the additionalAmount section of the JSON Response. This amount field contains the value of the original amount. An example of the JSON Response for a partial authorization follows the JSON Response for a completed transaction.

NOTE: Fields with an * are to be utilized for Card Holder Authentication purposes. The Point 2 Point Encryption (P2Pe) fields are available in the SendTranP2pe call.

NOTE: Fields with an ^ (pos.termld) are required for device-based transactions (Ex: VeriFone, PAX, etc.).

Element	Type	Description	M/C/O
KSN	an..20	<p>Key serial number (= Initial key serial number + Encryption counter) supplied by pin pad</p> <p>Condition:</p> <ul style="list-style-type: none">• Uses SendTranP2pe• KSN is in Bytes• Required for P2PE	C
FormatCode	n2	<p>The identification of the reader that is making the request i.e., anywhere commerce</p> <p>Valid Value:</p> <ul style="list-style-type: none">• 38 <p>Condition:</p> <ul style="list-style-type: none">• Uses SendTranP2pe• Required for P2PE	C
merc.id	ans..15	15-Digit Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M



merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	<p>Product Type: This is the product type for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 5 = Credit/Debit Card (Default)	O
tranCode	n..2	<p>Transaction Code: This indicates the type of transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Auth Only	M
card.EncryptPAN	ans..(no limit of characters applies to this field)	<p>This field contains the encrypted PAN used in the transaction.</p> <p>Condition:</p> <ul style="list-style-type: none">• Required for P2PE• Uses SendTranP2pe• Swiped (encrypt card.trk1 or card.trk2 or both)• In addition to the emvTlvReq field, EMV transactions are required to include the trk 2 data read from the chip in this field. <p>Note: If the cleartext does not satisfy the block size (e.g., 8 bytes for 3DES), then it must be padded with hex FF on the right-hand side before encrypting it. For example, if the clear text is [30 31 32 33 34 35 36 37 38 39] (10 bytes) and the block size is 8 bytes, then it must be padded with hex FF before encrypting it like so: [30 31 32 33 34 35 36 37 38 39 FF FF FF FF FF FF] (this is 16 bytes, which is divisible by 8 (i.e., block size)).</p>	C
card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <ul style="list-style-type: none">• Do Not Pass this field when using P2PE with card.EncryptPan data field.	M



card.sec	n..4	CVV2/CVC2/CID: This is the 3- or 4-digit card verification code located on the card.	C
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M
card.trk1	variable length 1 byte, binary + up to 76 ANS, EBCDIC; maximum 77 bytes	Track Data: This is the track 1 data obtained from the magnetic stripe of the card. Track 1 and/or track 2 required for card present/swipe transactions. All characters must be upper case including format code. indCode must = 1 for retail. Conditions: <ul style="list-style-type: none">• If AccountNumber is set, then this should not be set.• If Expiration Date is set, then this should not be set. Note: Starting and ending sentinels must be removed. For track 1, this includes the "%" and "?" symbols.	C
card.trk2	variable length 1 byte, binary + up to 37 N, 4-bit BCD	Track Data: This is the track 2 data obtained from the magnetic stripe of the card. Track 1 and/or track 2 required for card present/swipe transactions. All characters must be upper case including format code. indCode must = 1 for retail. Conditions: <ul style="list-style-type: none">• If AccountNumber is set, then this should not be set.• If Expiration Date is set, then this should not be set.• If Track1Data is present, trk2 is constructed from trk1. Note: Starting and ending sentinels must be removed. For track 2, this includes the ";" and "?" symbols.	C
card.dbtOrCdt	n1	This indicates whether the card is a debit or credit card. Valid Values: <ul style="list-style-type: none">• 1 = Credit	O



card.cardInputType	n1	<p>Contains information related to the EMV card input type:</p> <p>Valid values:</p> <ul style="list-style-type: none">0 = Normal (non-EMV magstripe or keyed)1 = EMV chip2 = EMV contactless3 = EMV fallback4 = Contactless swiped5 = Tokenized (Apple Pay, Samsung Pay, etc.)6 = Dual Interface (Discover only) <p>Condition:</p> <p>If the transaction is Chip/Contactless this data must be provided or the transaction will not be processed as such regardless of the data present in the emvTlvReq field.</p> <p>Note:</p> <p>If this is not set, then Normal (0) is assumed.</p>	C
contact.fullName	ans..61	<p>This is the customer's full name.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is only applicable in the SendTran, UpdtRecurrProf, and FndRecurrProf web service functions.	C
contact.coName	ans..30	This is the customer's company name.	O
contact.title	as..10	<p>This is the customer's title.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field</p>	O



contact.phone.type	n1	<p>This is the type of customer phone number.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a contact phone number is provided.	C
contact.phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	O
contact.addrLn1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
contact.addrLn2	ans..50	This is the customer's street address line 2.	O
contact.city	ans..40	This is the customer's city.	O
contact.state	a2	This is the customer's state. Values must be in all CAPS.	O



contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
contact.ctry	a2	This is the customer's country. The only permitted value is US.	O
contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
contact.ship.fullName	ans..61	This is the customer's full name for shipping purposes.	O
contact.ship.addrLn1	ans..50	This is the shipping street address line 1.	O
contact.ship.addrLn2	ans..50	This is the shipping street address line 2.	O
contact.ship.city	ans..40	This is the shipping city.	O
contact.ship.state	a2	This is the shipping state. Values must be in all CAPS.	O
contact.ship.zipCode	ans..9	<p>This is the shipping ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O



contact.ship.phone	ans..12	This is the shipping phone number. Phone number cannot be less than 10 or more than 12 characters. Valid special character: <ul style="list-style-type: none">• -	O
contact.ship.email	ans..75	This is the shipping email address. Valid Special Characters: <ul style="list-style-type: none">• .• _• @ Note: A special character cannot be the first character in this field.	O
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef.name	ans..50	This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call. Note: There are a total of 5 user defined fields that can be used per gateway id. This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O
usrDef. val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
^pos.termld	n4	The 4-digit terminal ID. This is used to construct the Terminal ID field. *Required for device-initiated transactions.	M
pos.pmtDesc	ans..25	Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead	O



indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO• 1 = Retail• 2 = eCommerce• 3 = Mobile Payment	C
tranFlags.dupChkTmPrd	n..7	<p>This indicates the window of time in seconds after a transaction is submitted during which you can override the duplicate settings set in the TXP account.</p>	O
tranFlags.convFeeAcptd	a1	<p>RESERVED FOR FUTURE USE</p> <p>This indicates whether or not a convenience fee was presented and accepted by the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• Y = Yes• N = No <p>Conditions:</p> <ul style="list-style-type: none">• When the merchant account is configured for a convenience fee, the convenience fee flag must be set to Y for all transactions.• If the merchant is not configured for convenience fee support, then this field is ignored.• If this is set to N, then no convenience fee was applied.• If this is set to Y, then a convenience fee was applied.	C
authReq.xid(*)	20-byte (160 bit) binary number	<p>Unique tracking number generated by the merchant server to identify the transaction and prevent resubmission/replay. This is in binary format.</p> <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	O



authReq.cavv(*)	an..40	<p>Cryptographic value that proves Visa cardholder was authenticated. This is in hexadecimal format</p> <p>Conditions:</p> <ul style="list-style-type: none">• Required for Visa transactions if cadlIndicator = 2• If set when cadlIndicator = 0 or 1, transaction will be rejected• Only applies for Visa transactions• Optional if indCode=2 ECOM. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ucafldcr(*)	n1	<p>Cardholder Authentication Data Collection (CADC) indicator.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = CADC is not supported at the merchant's web site• 1 = CADC is supported by the merchant, but CAVV/UCAF data was not populated• 2 = CADC is supported by the merchant, and CAVV/UCAF data was populated <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C
authReq.ucaf(*)	an..64	<p>Cryptographic value that proves MasterCard cardholder was authenticated. This is in hexadecimal format.</p> <p>Conditions:</p> <ul style="list-style-type: none">• Required for MasterCard transactions if cadlIndicator = 2• If set when cadlIndicator = 0 or 1, transaction will be rejected• Only applies for MasterCard transactions <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C



authReq.purcCard.mercOrdNr	ans..17	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction and passing tax amount includes tax indicator..</p>	C
authReq.purcCard.billShip.type	n1	<p>This is the ShipToZipCode type.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 3 = Ship to <p>Conditions:</p> <ul style="list-style-type: none">• This element is only applicable/required to AMEX transactions when shipping products to the cardholder. <p>Note: A default type of 3 is set if the type is not provided.</p>	C
authReq.purcCard.billShip.contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is only applicable/required to AMEX when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
authReq.ordNr	ans..50	<p>This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions.</p> <p>Condition:</p> <ul style="list-style-type: none">• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p>	C



authReq.pin	an16	<p>This is the encrypted PIN data in hexadecimal format. (8 byte binary)</p> <p>Condition:</p> <p>PIN Debit (not supported currently)</p> <p>EMV with Online PIN Cardholder Verification Method (CVM)</p>	C
authReq.securityinfo	an96	<p>This is the Security Related Control Information (Iso8583 Field 53) in hexadecimal format. (48 byte binary)</p> <p>This field should be right padded with binary zeros to 48 bytes.</p> <p>Condition:</p> <p>Required for PIN transactions.</p>	C
pmtFreq	n1	<p>Represents the frequency the cardholder is to be charged.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Instalment• 1 = Recurring <p>Condition:</p> <p>This field and the additional dependent fields identify the sale transaction as a recurring payment or installment payment. Pass these fields when the recurring or installment data and payments are managed internally within the business.</p> <p>Note: If you are using the TXP recurring engine (recurring webservices, hosted or virtual terminal)Do not pass these fields as the data is stored in TXP and the appropriate recurring indicators are sent by the TXP platform.</p>	C



initRecurPmtIdcr	n1	<p>This indicates whether the Recurring Payment is the first or subsequent payment</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Initial• 1 = Subsequent <p>Condition:</p> <ul style="list-style-type: none">• If pmtFreq is set to 1, then this is mandatory	C
pmtNr	n..2	<p>This is the current payment number that the cardholder is being charged.</p> <p>Condition:</p> <ul style="list-style-type: none">• If pmtFreq is set to 0, then this is mandatory	C
nrOfPmt	n..2	<p>This is the total number of payments the cardholder will be charged.</p> <ul style="list-style-type: none">• If pmtFreq is set to 0, then this is mandatory	C
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Nontaxable• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• This is only applicable when tranCode = 1. <p>Note:</p> <ul style="list-style-type: none">• Do not send this field unless you are processing a corporate/purchase card transaction.• Do Not Pass the Tax amount field when using values 0 and 2.	C



tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
deviceType	n2	<p>This is the description of the device type.</p> <p>Condition: This field is required for Master Card PayPass (Contactless) transactions.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 00 = Card (Default)• 01 = Mobile Phone or Smartphone with Mobile Network Operator (MNO) controlled removeable secure element (SIM or UICC)• 02 = Key Fob• 03 = Watch using a contactless chip or a fixed (non-removeable) secure element not controlled by the MNO• 04 = Mobile Tag• 05 = Wristband• 06 = Mobile Phone Case or Sleeve• 07 = Mobile Phone or Smart Phone with a fixed (non-removeable) secure element controlled by the MNO (such as CDMA).• 08 = Mobile Phone or Smartphone with removeable secure element not controlled by the MNO(such as a personalized SD card).• 09 = Mobile Phone or Smart Phone with a fixed (non-removeable) secure element not controlled by the MNO.• 10 = Tablet or E-Book with an MNO controlled removeable secure element (SIM or UICC).• 11 = Tablet or E-Book with a fixed (non-removeable) secure element not controlled by the MNO.• 12 = Tablet or E-Book with a removeable secure element not controlled by the MNO(such as a personalized SD card).• 13 – Tablet or E-Book with a fixed (non-removeable) secure element not controlled by the MNO.• 14 = Mobile Phone or Smartphone with a payment application running in a host	C



		<p>processor</p> <ul style="list-style-type: none">• 15 = Table or E-Book with a payment application running in a host processor• 16 = Mobile Phone or Smartphone with a payment application running in the TEE of a host processor• 17 = Table or E-Book with a payment application running in the TEE of a host processor• 18 = Watch with a payment application running in the TEE of a host process• 19 = Watch with a payment application running in a host processor• 20 = Card• 21 = Phone Mobile phone• 22 = Tablet/e-reader Tablet computer or ereader• 23 = Watch/Wristband Watch or wristband, including a fitness band, smart strap, disposable band, watch add-on, and security/ID band• 24 = Sticker• 25 = PC PC or laptop• 26 = Device Peripheral Mobile phone case or sleeve• 27 = Tag Key fob or mobile tag• 28 = Jewelry Ring, bracelet, necklace, and cuff links• 29 = Fashion Accessory Handbag, bag charm, and glasses• 30 = Garment Dress• 31 = Domestic Appliance Refrigerator, washing machine• 32 = Vehicle Vehicle, including vehicle attached devices• 33 = Media/Gaming Device Media or gaming device, including a set top box, media player, and television• 34-99 = These values reserved for future form factors. Any value in this range may occur within form factors and transaction data without prior notice.	
goodsSoldCode	n4	<p>GoodsSoldCode is required for card present American Express Gift Card Sales.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1000 (Gift Card)• None	C



emvTlvReq	an..255	EMV data for the request message encoded as BER-TLV (Basic Encoding Rules – Tag Length Value), in hexadecimal binary representation. Most data sent to and received from an EMV chip is encoded according to BER-TLV. Condition: Required for EMV	C
-----------	---------	---	---

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 1,  
  "card": {  
    "pan": "4485896261017708",  
    "sec": "998",  
    "xprDt": "2012",  
    "cardInputType": "0",  
  },  
  "contact": {  
    "fullName": "John Doe",  
    "phone": [  
      {  
        "type": 3,  
        "nr": 5551114444,  
      },  
    ],  
    "addrLn1": "123 Test ST",  
    "city": "Denver",  
    "state": "CO",  
    "zipCode": "80021",  
    "email": "info@email.com",  
    "ship": {  
      "addrLn1": "Jane Doe",  
      "addrLn2": "123 Main St",  
      "city": "Denver",  
      "state": "CO",  
      "zipCode": "80021",  
      "phone": "3037779899",  
      "email": "support@email.com",  
    }  
  }  
}
```



```
},
"reqAmt": "130",
"usrDef": [
{
  "name": "TestInvoice",
  "val": "PO741",
},
],
"pos": {
  "termId": "0001",
  "pmtDesc": "pmtDesc Value"
},
"indCode": 1,
"authReq": {
  "ordNr": "Invoice ID",
  "pin": " NO Sample Value Available",
  "securityinfo": " NO Sample Value Available",
},
"emvTlvReq": "NO Sample Value Available",
}
```

Example Response:

```
{
  "rspCode": "00",
  "rspCodeMsg": "Approved or completed successfully",
  "authRsp": {
    "tranId": "000000000002824",
    "valCode": "VICK"
  },
  "tranData": {
    "swchKey": "0AFF0E7015454AC65B758E22238159",
    "tranNr": "000011143391",
    "dtTm": "/Date(1461709465000-0700)/",
    "amt": "000000000130",
    "stan": "001071",
    "auth": "TAS854"
  },
  "cardType": "0",
  "mapCaid": "323004201000000",
  "merc": {
    "id": "9000",
    "inType": 1
  }
}
```

**Example Response for a Partial Authorization:**

```
{  
    "rspCode": "10",  
    "rspCodeMsg": "Approved, partial",  
    "authRsp": {  
        "aci": "N",  
        "tranId": "0000000000001802",  
        "valCode": "NA "  
    },  
    "tranData": {  
        "swchKey": "0AFF0E701544F1535D5EDCA9357490",  
        "tranNr": "000011141221",  
        "dtTm": "/Date(1461615670000-0700)/",  
        "amt": "00000000555",  
        "stan": "001068",  
        "auth": "TAS013"  
    },  
    "cardType": "0",  
    "mapCaid": "323004201000000",  
    "additionalAmount": [ {  
        "accountType": "Item00",  
        "amountType": "Item57",  
        "currencyCode": "840",  
        "amountSign": "C",  
        "amount": "000000001110"  
    }],  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```

Example Response for a Declined Transaction:

```
{ {  
    "rspCode": "01",  
    "rspCodeMsg": "Refer to card issuer",  
    "authRsp": {  
        "aci": "N",  
        "tranId": "0000000000002825",  
        "valCode": "NA "  
    },  
    "tranData": {  
        "swchKey": "0AFF0E7015454AED7900BCDB8D6D5E",  
        "tranNr": "000011143401",  
        "dtTm": "/Date(1461709625000-0700)/",  
    }  
}
```



```
        "amt": "000000000001",
        "stan": "001072"
    },
    "cardType": "0",
    "mapCaid": "323004201000000",
    "merc": {
        "id": "9000",
        "inType": 1
    }
}
```

Example SendTranP2pe Transaction Request:

```
{
    "KSN": "00002651400052e00043",
    "FormatCode": "38",
    "merc": {
        "id": "9000",
        "regKey": "REGKEY",
        "inType": 0
    },
    "tranCode": 1,
    "card": {
        "EncryptPAN":
            "5D27BB32A2C27B34273A2A7A4B6E468216C1AE4D6F7615D270BE0CB233A9120D56D36F4
            E993D649E3CAF51BCA98F855F8565D58222D884941C2E7BB0F657ABE006394E
            FD9BEE2DD4417A9D96C152EB300A29E85975A259A7EE4E4EF825411540725DDD56564D5A
            2A25709957E57E02A65609E9FF23EA1A85"
        "cardInputType": "0",
    },
    "contact": {
        "fullName": "My Name"
    },
    "reqAmt": "1544",
    "pos": {
        "termId": "0001",
        "pmtDesc": "pmtDesc Value"
    },
    "indCode": 1,
    "authReq": {
        "ordNr": "Invoice ID",
        "pin": " NO Sample Value Available",
        "securityinfo": " NO Sample Value Available",
    },
    "emvTlvReq": "NO Sample Value Available",
}
```



Example SendTranP2pe Transaction Response:

```
{  
    "rspCode": "00",  
    "rspCodeMsg": "Approved or completed successfully",  
    "authRsp": {  
        "aci": "N",  
        "tranId": "000000000000225",  
        "valCode": "5V65"  
    },  
    "tranData": {  
        "swchKey": "0AFA692315117D6F1FA05E3389D5EE",  
        "tranNr": "000039049941",  
        "dtTm": "/Date(1447803941000-0800)/",  
        "amt": "000000001544",  
        "stan": "000127",  
        "auth": "TAS119"  
    },  
    "cardType": "0",  
    "mapCaid": "555540492900000"}  
DO NOT COPY
```



4.5 Void (with mandatory fields)

This transaction is used to cancel a previous transaction not yet settled or marked for settlement, using mandatory fields. This transaction type prevents a transaction from being sent for settlement and completes an authorization reversal as part of its process.

NOTE: Fields with an ^ (pos.termlD) are required for device-based transactions (Ex: VeriFone, PAX, etc.).

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID.	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 2 = Auth Reversal for Auth Only• 6 = Settle Void for Auth and Settle	M
^pos.termlD	n4	The 4-digit terminal ID. This is used to construct the Terminal ID field. *Required for device-initiated transactions.	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M
emvDeclinedAfterOnline	n1	Used to indicate whether a reversal is due to a decline after the online host has approved an EMV request. Valid values: 1 = 2517/Chip declined transaction after online issuer approved 2 = 2516/Premature chip card removal (after online request sent before response received) Condition: <ul style="list-style-type: none">• Required for EMV	C

**Example Request:**

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1  
  },  
  "tranCode": "2",  
  "pos": {  
    "termId": "0001"  
  },  
  "origTranData": {"tranNr": "000010700000"}  
  "emvDeclinedAfterOnline": "NO Sample Value Available"  
}  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {},  
  "tranData": {  
    "swchKey": "0AFF0EDF151141AC022DA6AE59F136",  
    "tranNr": "000010714711",  
    "dtTm": "/Date(1447737676000-0700)/",  
    "amt": "000000000130",  
    "stan": "001080",  
    "auth": "VTLMC1"  
  },  
  "cardType": "1",  
  "mapCaid": "555540492900000",  
  "additionalAmount": [ {  
    "accountType": "30",  
    "amountType": "53",  
    "currencyCode": "840",  
    "amountSign": "D",  
    "amount": "000000000130"  
  }],  
  "merc": {  
    "id": "9000",  
    "inType": 1  
  }  
}
```



4.6 Force/Voice Authorization Only (with mandatory fields)

This transaction type is used to settle an authorization obtained from an external source, using mandatory fields only. The authorization code is a mandatory field.

NOTE: Fields with an ^ (pos.termlD) are required for device-based transactions (Ex: VeriFone, PAX, etc.).

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID.	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 3 = Settle Only	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.	M
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required when settling a transaction with an amount that is different compared to its original authorization.• This is required whenever settling transactions authorized externally to this platform (i.e., force/voice authorizations).• When tranCode = 3, this field should be greater than 0.	M
^pos.termlD	n4	The 4-digit terminal ID. This is used to construct the Terminal ID field. *Required for device-initiated transactions.	M



origTranData.dtTm	dateTime	This contains the local date and time when the transaction takes place at the card acceptor location. Ex: YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time. TXP doesn't allow for the date/time to be set in the future.	M
origTranData.auth	anp..6	Authorization: This is the authorization code received from the external source.	M

DO NOT COPY

**Example Request:**

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 3,  
  "card": {  
    "pan": "4485896261017708",  
    "xprDt": "2012",  
  },  
  "reqAmt": "1010",  
  "pos": {  
    "termId": "0001"  
  },  
  "origTranData": {  
    "dtTm": "2001-01-01T00:00:00.000-07:00",  
    "auth": "TAS456",  
  },  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {},  
  "tranData": {  
    "swchKey": "0AFF0EDF1511428C3BF1FBA678D101",  
    "tranNr": "000010714751",  
    "dtTm": "/Date(1447738594000-0700)/",  
    "amt": "000000001010",  
    "stan": "001082",  
    "auth": "TAS456"  
  },  
  "cardType": "3",  
  "mapCaid": "555540492900000",  
  "merc": {  
    "id": "9000",  
    "inType": 1  
  }  
}
```



4.7 Force/Voice Authorization Only (with conditional and optional fields)

This transaction type is used to settle an authorization obtained from an external source, using conditional and optional fields. The authorization code is a mandatory field.

NOTE: Fields with an ^ (pos.termld) are required for device-based transactions (Ex: VeriFone, PAX, etc.).

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	Product Type: This is the product type for this particular transaction. Valid Values: <ul style="list-style-type: none">• 5 = Credit/Debit Card (Default)	O
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 3 = Settle Only	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.	M
card.dbtOrCdt	n1	This indicates whether the card is a debit or credit card. Valid Values: <ul style="list-style-type: none">• 1 = Credit	O
contact.fullName	ans..61	This is the customer's full name. Conditions: <ul style="list-style-type: none">• This is only applicable in the SendTran, UpdtRecurrProf, and FndRecurrProf web service functions.	C



contact.coName	ans..30	This is the customer's company name.	O
contact.title	as..10	<p>This is the customer's title.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field.</p>	O
contact.phone.type	n1	<p>This is the type of customer phone number.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C
contact.phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	O
contact.addrLn1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is highly recommended for appropriate card not present qualification.	O
contact.addrLn2	ans..50	This is the customer's street address line 2.	O
contact.city	ans..40	This is the customer's city.	O
contact.state	a2	This is the customer's state. Values must be in all CAPS.	O
contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is highly recommended for appropriate card not present qualification. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O



contact.ctry	a2	This is the customer's country. The only permitted value is US.	O
contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
contact.ship.fullName	ans..61	This is the customer's full name for shipping purposes.	O
contact.ship.addrLn1	ans..50	This is the shipping street address line 1.	O
contact.ship.addrLn2	ans..50	This is the shipping street address line 2.	O
contact.ship.city	ans..40	This is the shipping city.	O
contact.ship.state	a2	This is the shipping state. Values must be in all CAPS.	O
contact.ship.zipCode	ans..9	<p>This is the shipping ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O
contact.ship.phone	ans..12	<p>This is the shipping phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	O
contact.ship.email	ans..75	<p>This is the shipping email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O



reqAmt	n..8	<p>This contains the amount associated with this transaction in minor denominations.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required when settling a transaction with an amount that is different compared to its original authorization.• This is required whenever settling transactions authorized externally to this platform (i.e., force/voice authorizations).• When tranCode = 3, this field should be greater than 0.	M
usrDef.name	ans..50	<p>This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call.</p> <p>Note: There are a total of 5 user defined fields that can be used per gateway id.</p> <p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef. val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
^pos.termlId	n4	The 4-digit terminal ID. This is used to construct the Terminal ID field. *Required for device-initiated transactions.	M
pos.pmtDesc	ans..25	Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead	O
indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO• 1 = Retail	O



tranFlags.dupChkTmPrd	n..7	This indicates the window of time in seconds after a transaction is submitted during which you can override the duplicate settings set in the TXP account.	O
tranFlags.convFeeAcptd	a1	<p>RESERVED FOR FUTURE USE</p> <p>This indicates whether or not a convenience fee was presented and accepted by the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• Y = Yes• N = No <p>Conditions:</p> <ul style="list-style-type: none">• When the merchant account is configured for a convenience fee, the convenience fee flag must be set to Y for all transactions.• If the merchant is not configured for convenience fee support, then this field is ignored.• If this is set to N, then no convenience fee was applied.• If this is set to Y, then a convenience fee was applied.	C
authReq.purcCard.mercOrdNr	ans..17	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction and passing tax amount includes tax indicator..</p>	C
authReq.purcCard.billShip.type	n1	<p>This is the ShipToZipCode type.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 3 = Ship to <p>Conditions:</p> <ul style="list-style-type: none">• This element is only applicable/required to AMEX transactions when shipping products to the cardholder. <p>Note: A default type of 3 is set if the type is not provided.</p>	C
authReq.purcCard.billShip.contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is only applicable/required to AMEX when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C



authReq.ordNr	ans..50	This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions. Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.	O
origTranData.dtTm	dateTime	This contains the local date and time when the transaction takes place at the card acceptor location. Ex: YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time. TXP doesn't allow for the date/time to be set in the future.	M
origTranData.auth	anp..6	Authorization: This is the authorization code received from the external source.	M
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Nontaxable• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• This is only applicable when tranCode = 1. <p>Note:</p> <ul style="list-style-type: none">• Do not send this field unless you are processing a corporate/purchase card transaction.• Do Not Pass the Tax amount field when using values 0 and 2.	C
tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C

**Example Request:**

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 3,  
  "card": {  
    "pan": "4485896261017708",  
    "sec": "999",  
  },  
  "contact": {  
    "fullName": "William Butler",  
    "phone": [  
      {  
        "type": 1,  
        "nr": 3036258724,  
      },  
      {  
        "type": 2,  
        "nr": 7207718166,  
      },  
    ],  
    "addrLn1": "4321 TEST ST.",  
    "addrLn2": "STE 100",  
    "city": "Denver",  
    "state": "CO",  
    "zipCode": "80501",  
    "ship": {  
      "fullName": "Jane Doe",  
      "addrLn1": "321 Main St",  
      "city": "Denver",  
      "state": "CO",  
      "zipCode": "80501",  
      "phone": "3334445555",  
    }  
  "reqAmt": "130",  
  "pos": {  
    "termId": "0001"  
  },  
  "indCode": 0,  
  "authReq": {  
    "ordNr": "Invoice 322",  
  },  
}
```



```
"origTranData": {  
    "dtTm": "2001-01-01T00:00:00.000-07:00",  
    "auth": "TAS456",  
},  
}
```

Example Response:

```
{  
    "rspCode": "00",  
    "authRsp": {},  
    "tranData": {  
        "swchKey": "0AFF0EDF1511423FBB3ED5D00EA7BA",  
        "tranNr": "000010714741",  
        "dtTm": "/Date(1447738281000-0700)/",  
        "amt": "000000000130",  
        "stan": "001081",  
        "auth": "TAS456"  
    },  
    "cardType": "0",  
    "mapCaid": "555540492900000",  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    },  
    "authReq": {"ordNr": "Invoice 322"}  
}
```



4.8 Force/Voice Authorization Void (with mandatory fields)

This transaction type is used to cancel a force/voice authorization transaction, using mandatory fields only. This transaction does not perform an authorization reversal.

NOTE: Fields with an ^ (pos.termlD) are required for device-based transactions (Ex: VeriFone, PAX, etc.).

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 6 = Settle Void	M
^pos.termlD	n4	The 4-digit terminal ID. This is used to construct the Terminal ID field. *Required for device-initiated transactions.	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 6,  
  "pos": {  
    "termlD": "0001"  
  },  
  "origTranData": {  
    "tranNr": "000010700000",  
  }  
}
```



},
}

DO NOT COPY



Example Response:

```
{  
    "rspCode": "00",  
    "rspCodeMsg": "Approved or completed successfully",  
    "authRsp": {},  
    "tranData": {  
        "swchKey": "0AFF0EDF151141AC022DA6AE59F136",  
        "tranNr": "000010714711",  
        "dtTm": "/Date(1447737676000-0700)/",  
        "amt": "000000000130",  
        "stan": "001080",  
        "auth": "VTLMC1"  
    },  
    "cardType": "1",  
    "mapCaid": "555540492900000",  
    "additionalAmount": [ {  
        "accountType": "30",  
        "amountType": "53",  
        "currencyCode": "840",  
        "amountSign": "D",  
        "amount": "000000000130"  
    }],  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```

DO NOT COPY



4.9 Credit / Return (with mandatory fields)

This transaction type is used to issue a credit (refund) to a card that has a corresponding debit/sale transaction that has already settled, using mandatory fields only.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 4 = Credit/Return	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. The amount cannot be greater than the original sale amount. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef.name	ans..50	This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call. Note: There are a total of 5 user defined fields that can be used per gateway id. This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O
usrDef. val	ans..40 00	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
authReq.ordNr	ans..50	This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions. Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.	O



origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M
---------------------	-------	--	---

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 4,  
  "reqAmt": "0002",  
  "origTranData": {  
    "tranNr": "000010700000",  
  },  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {},  
  "tranData": {  
    "swchKey": "0AFF0E701545A01E2E26D73C2D85E4",  
    "tranNr": "000011147911",  
    "dtTm": "/Date(1461798953000-0700)/",  
    "amt": "000000000002",  
    "stan": "001087"  
  },  
  "cardType": "0",  
  "mapCaid": "323004201000000",  
  "merc": {  
    "id": "9000",  
    "inType": 1  
  }  
}
```



4.10 Credit / Return Void (with mandatory fields)

This transaction type is used to cancel a credit/refund transaction, using mandatory fields only.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 13 = Credit/Return Void	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M



Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1  
  },  
  "tranCode": "13",  
  "origTranData": {"tranNr": "000010700000"}  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {},  
  "tranData": {  
    "swchKey": "0AFF0E701545A02CA936ADF73A000B",  
    "tranNr": "000011147911",  
    "dtTm": "/Date(1461799013000-0700)/",  
    "amt": "000000000002",  
    "stan": "001088"  
  },  
  "cardType": "0",  
  "mapCaid": "323004201000000",  
  "merc": {  
    "id": "9000",  
    "inType": 1  
  }  
}
```



4.11 Blind Credit (with mandatory fields)

This transaction type is used to issue a credit (refund) to a card that does not have a corresponding debit/sale transaction, using mandatory fields only. Due to risks associated with this transaction type, merchants are required to obtain approval from TSYS prior to performing blind credit transactions.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 5 = Blind Credit	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 5,  
  "card": {  
    "pan": "4485896261017708",  
    "xprDt": "2012",  
  },  
}
```



```
"reqAmt": "1010",  
}
```

Example Response:

```
{  
    "rspCode": "00",  
    "rspCodeMsg": "Approved or completed successfully",  
    "authRsp": {},  
    "tranData": {  
        "swchKey": "0AFF0E701545A06F5CECD237FA85C3",  
        "tranNr": "000011147941",  
        "dtTm": "/Date(1461799286000-0700)/",  
        "amt": "000000001110",  
        "stan": "001092"  
    },  
    "cardType": "0",  
    "mapCaid": "323004201000000",  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```

DO NOT COPY



4.12 Blind Credit (with conditional and optional fields)

This transaction type is used to issue a credit (refund) to a card that does not have a corresponding debit/sale transaction, using conditional and optional fields. Due to risks associated with this transaction type, merchants are required to obtain approval from TSYS prior to performing blind credit transactions.

NOTE: Fields with an * are to be utilized for Card Holder Authentication purposes.
The Point 2 Point Encryption (P2Pe) fields are available in the SendTranP2pe call.

Element	Type	Description	M/C/O
KSN	an..20	<p>Key serial number (= Initial key serial number + Encryption counter) supplied by pin pad</p> <p>Condition:</p> <ul style="list-style-type: none">• Uses SendTranP2pe• KSN is in Bytes• Required for P2PE	C
FormatCode	n2	<p>The identification of the reader that is making the request i.e., anywhere commerce</p> <p>Valid Value:</p> <ul style="list-style-type: none">• 38 <p>Condition:</p> <ul style="list-style-type: none">• Uses SendTranP2pe• Required for P2PE	C
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	<p>Product Type: This is the product type for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 5 = Credit/Debit Card (Default)	O



tranCode	n..2	<p>Transaction Code: This indicates the type of transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 5 = Blind Credit	M
card.EncryptPAN	ans..(no limit of characters applies to this field)	<p>This field contains the encrypted PAN used in the transaction.</p> <p>Condition:</p> <ul style="list-style-type: none">• Uses SendTranP2pe• Required for P2PE• Swiped (encrypt card.trk1 or card.trk2 or both)• If the cleartext does not satisfy the block size (e.g., 8 bytes for 3DES), then it must be padded with hex FF on the right-hand side before encrypting it. For example, if the clear text is [30 31 32 33 34 35 36 37 38 39] (10 bytes) and the block size is 8 bytes, then it must be padded with hex FF before encrypting it like so: [30 31 32 33 34 35 36 37 38 39 FF FF FF FF FF] (this is 16 bytes, which is divisible by 8 (i.e., block size)).	C
card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <ul style="list-style-type: none">• Do Not Pass this field when using P2PE with card.EncryptPan data field.	M
card.trk1	variable length 1 byte, binary + up to 76 ANS, EBCDIC; maximum 77 bytes	<p>Track Data: This is the track 1 data obtained from the magnetic stripe of the card. Track 1 and/or track 2 required for card present/swipe transactions. All characters must be upper case including format code. indCode must = 1 for retail.</p> <p>Conditions:</p> <ul style="list-style-type: none">• If AccountNumber is set, then this should not be set.• If Expiration Date is set, then this should not be set. <p>Note: Starting and ending sentinels must be removed. For track 1, this includes the "%" and "?" symbols.</p>	C



card.trk2	variable length 1 byte, binary + up to 37 N, 4-bit BCD	<p>Track Data: This is the track 2 data obtained from the magnetic stripe of the card. Track 1 and/or track 2 required for card present/swipe transactions. All characters must be upper case including format code. indCode must = 1 for retail.</p> <p>Conditions:</p> <ul style="list-style-type: none">• If AccountNumber is set, then this should not be set.• If Expiration Date is set, then this should not be set.• If Track1Data is present, trk2 is constructed from trk1. <p>Note: Starting and ending sentinels must be removed. For track 2, this includes the "," and "?" symbols.</p>	C
card.dbtOrCdt	n1	<p>This indicates whether the card is a debit or credit card.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Credit	O
contact.fullName	ans..61	<p>This is the customer's full name.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is only applicable in the SendTran, UpdtRecurrProf, and FndRecurrProf web service functions.	C
contact.coName	ans..30	This is the customer's company name.	O
contact.title	as..10	<p>This is the customer's title.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field.</p>	O
contact.phone.type	n1	<p>This is the type of customer phone number.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C



contact.phone.nr	ans..12	This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters. Valid special character: • -	O
contact.addrLn1	ans..50	This is the customer's street address line 1. Condition: <ul style="list-style-type: none">If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
contact.addrLn2	ans..50	This is the customer's street address line 2.	O
contact.city	ans..40	This is the customer's city.	O
contact.state	a2	This is the customer's state. Values must be in all CAPS.	O
contact.zipCode	ans..9	This is the customer's ZIP code. Condition: <ul style="list-style-type: none">If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. Note: Hyphen is not allowed for a 9 digit value.	C
contact.ctry	a2	This is the customer's country. The only permitted value is US.	O
contact.email	ans..75	This is the customer's email address. Valid Special Characters: • . • _ • % • + • - • @ Note: A special character cannot be the first character in this field.	O
contact.ship.fullName	ans..61	This is the customer's full name for shipping purposes.	O



contact.ship.addrLn1	ans..50	This is the shipping street address line 1.	O
contact.ship.addrLn2	ans..50	This is the shipping street address line 2.	O
contact.ship.city	ans..40	This is the shipping city.	O
contact.ship.state	a2	This is the shipping state. Values must be in all CAPS.	O
contact.ship.zipCode	ans..9	This is the shipping ZIP code. Note: Hyphen is not allowed for a 9 digit value.	O
contact.ship.phone	ans..12	This is the shipping phone number. Phone number cannot be less than 10 or more than 12 characters. Valid special character: • -	O
contact.ship.email	ans..75	This is the shipping email address. Valid Special Characters: • . • _ • % • + • - • @ Note: A special character cannot be the first character in this field.	O
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: • No special characters are allowed. • A leading zero is required.	M
usrDef.name	ans..50	This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call. Note: There are a total of 5 user defined fields that can be used per gateway id. This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O



usrDef. val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
pos.pmtDesc	ans..25	Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead	O
indCode	n1	This is the Industry Code that overrides the merchant profile information for this particular transaction. Valid Values: <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO• 1 = Retail	O
tranFlags.dupChkTmPrd	n..7	This indicates the window of time in seconds after a transaction is submitted during which you can override the duplicate settings set in the TXP account.	O
tranFlags.convFeeAcptd	a1	RESERVED FOR FUTURE USE This indicates whether or not a convenience fee was presented and accepted by the customer. Valid Values: <ul style="list-style-type: none">• Y = Yes• N = No Conditions: <ul style="list-style-type: none">• When the merchant account is configured for a convenience fee, the convenience fee flag must be set to Y for all transactions.• If the merchant is not configured for convenience fee support, then this field is ignored.• If this is set to N, then no convenience fee was applied.• If this is set to Y, then a convenience fee was applied.	C



authReq.xid(*)	20-byte (160 bit) binary number	Unique tracking number generated by the merchant server to identify the transaction and prevent resubmission/replay. This is in binary format. Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.	O
authReq.cavv(*)	an..40	Cryptographic value that proves Visa cardholder was authenticated. This is in hexadecimal format Conditions: <ul style="list-style-type: none">• Required for Visa transactions if cadlIndicator = 2• If set when cadlIndicator = 0 or 1, transaction will be rejected• Only applies for Visa transactions• Optional if indCode=2 ECOM. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ucafIdcr(*)	n1	Cardholder Authentication Data Collection (CADC) indicator. Valid Values: <ul style="list-style-type: none">• 0 = CADC is not supported at the merchant's web site• 1 = CADC is supported by the merchant, but CAVV/UCAF data was not populated• 2 = CADC is supported by the merchant, and CAVV/UCAF data was populated Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.	C



authReq.ucaf(*)	an..64	<p>Cryptographic value that proves MasterCard cardholder was authenticated. This is in hexadecimal format.</p> <p>Conditions:</p> <ul style="list-style-type: none">Required for MasterCard transactions if cadlIndicator = 2If set when cadlIndicator = 0 or 1, transaction will be rejectedOnly applies for MasterCard transactions <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C
authReq.purcCard.mercOrdNr	ans..17	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">SP <p>Conditions:</p> <ul style="list-style-type: none">This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction and passing tax amount includes tax indicator.</p>	C
authReq.ordNr	ans..50	<p>This is the customer reference ID (order number) assigned to this transaction.</p> <p>Condition:</p> <ul style="list-style-type: none">If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p>	C



tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Nontaxable• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• This is only applicable when tranCode = 1. <p>Note:</p> <ul style="list-style-type: none">• Do not send this field unless you are processing a corporate/purchase card transaction.• Do Not Pass the Tax amount field when using values 0 and 2.	C
tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 5,  
  "card": {  
    "pan": "4485896261017708",  
    "sec": "998",  
    "xprDt": "2012",  
  },  
  "contact": {  
    "fullName": "John Doe",  
    "phone": [  
      {  
        "type": 3,  
        "nr": 5551114444,  
      }  
    ]  
  }  
}
```



```
        },
    ],
    "addrLn1": "123 Test ST",
    "city": "Denver",
    "state": "CO",
    "zipCode": "80021",
    "email": "info@email.com",
    "ship": {
        "addrLn1": "Jane Doe",
        "addrLn2": "123 Main St",
        "city": "Denver",
        "state": "CO",
        "zipCode": "80021",
        "phone": "3037779899",
        "email": "support@email.com",
    }
},
"reqAmt": "130",
"usrDef": [
{
    "name": "TestInvoice",
    "val": "PO741",
},
],
"indCode": 0,
}
```

Example Response:

```
{
    "rspCode": "00",
    "rspCodeMsg": "Approved or completed successfully",
    "authRsp": {},
    "tranData": {
        "swchKey": "0AFF0E701545A06F5CECD237FA85C3",
        "tranNr": "000011147941",
        "dtTm": "/Date(1461799286000-0700)/",
        "amt": "000000001110",
        "stan": "001092"
    },
    "cardType": "0",
    "mapCaid": "323004201000000",
    "merc": {
        "id": "9000",
        "inType": 1
    }
}
```

**Example SendTranP2pe Transaction Request:**

```
{  
  "KSN": "00002651400052e00043",  
  "FormatCode": "38",  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 0  
  },  
  "tranCode": 5,  
  "card": {  
    "EncryptPAN":  
      "5D27BB32A2C27B34273A2A7A4B6E468216C1AE4D6F7615D270BE0CB233A9120D56D36F4  
      E993D649E3CAF51BCA98F855F8565D58222D884941C2E7BB0F657ABE006394E  
      FD9BEE2DD4417A9D96C152EB300A29E85975A259A7EE4E4EF825411540725DDD56564D5A  
      2A25709957E57E02A65609E9FF23EA1A85"  
  },  
  "contact": {  
    "fullName": "My Name"  
  },  
  "reqAmt": "1544",  
  "indCode": 1  
}
```

Example SendTranP2peTransaction Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {},  
  "tranData": {  
    "swchKey": "0AFF0E701545A06F5CECD237FA85C3",  
    "tranNr": "000011147941",  
    "dtTm": "/Date(1461799286000-0700)/",  
    "amt": "000000001110",  
    "stan": "001092"  
  },  
  "cardType": "0",  
  "mapCaid": "323004201000000",  
  "merc": {  
    "id": "9000",  
    "inType": 1  
  }  
}
```



4.13 Blind Credit Void (with mandatory fields)

This transaction type is used to cancel a blind credit transaction, using mandatory fields only.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 13 = Credit/Return Void	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

Example Request:

```
{
  "merc": {
    "id": "9000",
    "regKey": "REGKEY",
    "inType": 1
  },
  "tranCode": "13",
  "origTranData": {"tranNr": "000010700000"}
}
```



Example Response:

```
{  
    "rspCode": "00",  
    "rspCodeMsg": "Approved or completed successfully",  
    "authRsp": {},  
    "tranData": {  
        "swchKey": "0AFF0E701545A02CA936ADF73A000B",  
        "tranNr": "000011147911",  
        "dtTm": "/Date(1461799013000-0700)/",  
        "amt": "000000000002",  
        "stan": "001088"  
    },  
    "cardType": "0",  
    "mapCaid": "323004201000000",  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```

DO NOT COPY



4.14 Account Verification (with mandatory and conditional fields)

This transaction type is used to verify a cardholder's account information with the card issuer, using mandatory fields only. This transaction type is commonly referred to as a 0-dollar authorization. As such, this transaction cannot be voided or settled.

Different card associations have different requirements for account verification. The following table describes the current requirements.

Card Type	Description
Amex	Address and Zip Code are required
MasterCard	Address is optional but Zip Code is required
Visa	Address and Zip Code are optional
Discover	Address and Zip Code are optional
	American Express Account Verifications do not support the submission of a CID/CVV2 value. Any AMEX Account Verification transaction with a CID/CVV2 provided may or may not receive a valid CID response on the transaction. AMEX Address Verification Service is fully supported on Account Verification transactions.

Note: The Point 2 Point Encryption (P2Pe) fields are available in the SendTranP2pe call.

Element	Type	Description	M
KSN	an..20	<p>Key serial number (= Initial key serial number + Encryption counter) supplied by pin pad</p> <p>Condition:</p> <ul style="list-style-type: none">• Uses SendTranP2pe• KSN is in Bytes• Required for P2PE	C
FormatCode	n2	<p>The identification of the reader that is making the request i.e., anywhere commerce</p> <p>Valid Value:</p> <ul style="list-style-type: none">• 38 <p>Condition:</p> <ul style="list-style-type: none">• Uses SendTranP2pe• Required for P2PE	C



merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 9 = Account Verification Only	M
card.EncryptPAN	ans..(no limit of characters applies to this field)	This field contains the encrypted PAN used in the transaction. Condition: <ul style="list-style-type: none">• Uses SendTranP2pe• Required for P2PE• Swiped (encrypt card.trk1 or card.trk2 or both)• Keyed (encrypt card.pan)• If the cleartext does not satisfy the block size (e.g., 8 bytes for 3DES), then it must be padded with hex FF on the right-hand side before encrypting it. For example, if the clear text is [30 31 32 33 34 35 36 37 38 39] (10 bytes) and the block size is 8 bytes, then it must be padded with hex FF before encrypting it like so: [30 31 32 33 34 35 36 37 38 39 FF FF FF FF FF FF] (this is 16 bytes, which is divisible by 8 (i.e., block size)).	C
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe. <ul style="list-style-type: none">• Do Not Pass this field when using P2PE with card.EncryptPan data field.	M
card.sec	n..4	CVV2/CVC2/CID: This is the 3- or 4-digit card verification code located on the card.	O
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M



contact.addrLn1	ans..50	This is the customer's street address line 1. Conditions: <ul style="list-style-type: none">Address is required for Amex and optional for Visa, MasterCard and Discover.	C
contact.zipCode	ans..9	This is the customer's ZIP code. Conditions: <ul style="list-style-type: none">ZIP code is required for Amex, MasterCard, Discover and is optional for Visa. Note: Hyphen is not allowed for a 9 digit value.	C

**Example Request:**

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 9,  
  "card": {  
    "pan": "4485896261017708",  
    "sec": "999",  
    "xprDt": "2012",  
  },  
  "contact": {  
    "fullName": "William Butler",  
    "addrLn1": "8320",  
    "addrLn2": "STE 100",  
    "city": "Denver",  
    "state": "CO",  
    "zipCode": "85284",  
  },  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {  
    "secRslt": "M",  
    "avsRslt": "Y",  
    "aci": "N",  
    "tranId": "000000000000904"  
  },  
  "tranData": {  
    "swchKey": "0AFF0E701545A0A2730AAFCDA9FF47",  
    "tranNr": "000011147951",  
    "dtTm": "/Date(1461799495000-0700)/",  
    "amt": "000000000000",  
    "stan": "001093",  
    "auth": "PREATH"  
  },  
  "cardType": "0",  
  "mapCaid": "323004201000000",  
  "merc": {  
    "id": "9000",  
  },  
}
```



```
        "inType": 1  
    }  
}
```

DO NOT COPY



4.15 Wallet Sale (with mandatory fields)

This transaction type is used to perform a sale transaction against an existing manual recurring profile (aka wallet), using mandatory fields only.

Element	Type	Description	M/C
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 14 = Recurring(Manual) Auth/Settle• 0 = Auth Only	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
recurMan.id	n..19	This is the Wallet ID.	M

Example Request:

```
{
  "merc": {
    "id": "9000",
    "regKey": "REGKEY",
    "inType": 1,
  },
  "tranCode": 14,
  "reqAmt": "112",
  "recurMan": {
    "id": 1315270290000000000000,
  },
}
```



Example Response:

```
{  
    "rspCode": "00",  
    "rspCodeMsg": "Approved or completed successfully",  
    "authRsp": {  
        "avsRslt": "N",  
        "tranId": "0000000000000904",  
        "valCode": "HTR2"  
    },  
    "tranData": {  
        "swchKey": "0AFF0E701545A0B5A6271E1B6642F6",  
        "tranNr": "000011147961",  
        "dtTm": "/Date(1461799574000-0700)/",  
        "amt": "000000000130",  
        "stan": "001094",  
        "auth": "TAS788"  
    },  
    "cardType": "0",  
    "mapCaid": "323004201000000",  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    },  
    "authReq": {"ordNr": "Auto NN"}  
}
```



4.16 Wallet Sale (with mandatory and conditional fields)

This transaction type is used to perform a sale transaction against an existing manual recurring profile (aka wallet), using conditional and optional fields.

NOTE: Fields with an * are to be utilized for Card Holder Authentication purposes.

Element	Type	Description	M/C
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	<p>This is the product type for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 5 = Credit/Debit Card (Default)	O
tranCode	n..2	<p>Transaction Code: This indicates the type of transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 14 = Recurring(Manual) Auth/Settle• 0 = Auth Only	M
reqAmt	n..8	<p>This contains the amount associated with this transaction in minor denominations.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef.name	ans..50	This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O
usrDef.val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
pos.pmtDesc	ans..25	Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead	O



indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO• 2 = eCommerce	O
authReq.purcCard.mercOrdNr	ans..17	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• This is only applicable when Merc.prodType = 5. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction and passing tax amount includes tax indicator.</p>	C
authReq.purcCard.billShip.type	n1	<p>This is the ShipToZipCode type.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 3 = Ship to <p>Conditions:</p> <ul style="list-style-type: none">• This element is only applicable/required to AMEX transactions when shipping products to the cardholder. <p>Note: A default type of 3 is set if the type is not provided.</p>	C
authReq.purcCard.billShip.contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is only applicable/required to AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
authReq.xid(*)	20-byte (160 bit) binary number	<p>Unique tracking number generated by the merchant server to identify the transaction and prevent resubmission/replay. This is in binary format.</p> <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	O



authReq.cavv(*)	an..40	Cryptographic value that proves Visa cardholder was authenticated. This is in hexadecimal format Conditions: <ul style="list-style-type: none">• Required for Visa transactions if cadlIndicator = 2• If set when cadlIndicator = 0 or 1, transaction will be rejected• Only applies for Visa transactions• Optional if indCode=2 ECOM. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ucafldcr(*)	n1	Cardholder Authentication Data Collection (CADC) indicator. Valid Values: <ul style="list-style-type: none">• 0 = CADC is not supported at the merchant's web site• 1 = CADC is supported by the merchant, but CAVV/UCAF data was not populated• 2 = CADC is supported by the merchant, and CAVV/UCAF data was populated Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ucaf(*)	an..64	Cryptographic value that proves MasterCard cardholder was authenticated. This is in hexadecimal format. Conditions: <ul style="list-style-type: none">• Required for MasterCard transactions if cadlIndicator = 2• If set when cadlIndicator = 0 or 1, transaction will be rejected• Only applies for MasterCard transactions Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ordNr	ans..50	This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions. Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.	O
recurMan.id	n..19	This is the Wallet ID.	M
recurMan.sec	n..4	CVV2/CVC2/CID: This the 3 or 4 digit card verification code located on the card.	C



tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <p>This is required for purchase card transactions.</p> <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C



Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 14,  
  "reqAmt": "112",  
  "indCode": 0,  
  "authReq": {  
    "ordNr": "Invoice #312",  
  },  
  "recurMan": {  
    "id": 13152702900000000000,  
  },  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {  
    "avsRsIt": "N",  
    "tranId": "000000000000904",  
    "valCode": "HTR2"  
  },  
  "tranData": {  
    "swchKey": "0AFF0E701545A0B5A6271E1B6642F6",  
    "tranNr": "000011147961",  
    "dtTm": "/Date(1461799574000-0700)/",  
    "amt": "00000000130",  
    "stan": "001094",  
    "auth": "TAS788"  
  },  
  "cardType": "0",  
  "mapCaid": "323004201000000",  
  "merc": {  
    "id": "9000",  
    "inType": 1  
  },  
  "authReq": {"ordNr": "Invoice #312"}  
}
```



4.17 Settle (with mandatory fields)

This transaction type is used to request settlement of an Auth Only transaction, using mandatory fields only.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 3 = Settle Only	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required when settling a transaction with an amount that is different compared to its original authorization.	C
tranFlags.mgdSettle	a1	Reserved for Future Use -This indicates the transaction is a Managed Settlement request. Note: All subsequent transactions will contain the original transaction data. Valid values: Y, N Conditions: <ul style="list-style-type: none">• If the merchant is not configured to allow managed settlement, do not send this field.• If indCode = 1 (Retail), this field must be set to 'N'	C
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

**Example Request:**

```
{  
  "merc": {  
    "id": "XXXXXXXXXXXX",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 3,  
  "reqAmt": "130",  
  "tranFlags": {  
    "mgdSettle": "Y",  
  },  
  "origTranData": {  
    "tranNr": "000000000000",  
  },  
}
```

Example SendTranP2pe Request:

```
{  
  "KSN": "FXXXXXXXXXXXXXXXXXXXXX",  
  "FormatCode": "38",  
  "merc": {  
    "id": "XXXXXXXXXXXX",  
    "regKey": "XXXXXXXXXXXXXXXXXX",  
    "inType": 1  
  },  
  "tranCode": 3,  
  "card": {  
    "EncryptPAN": "9AXXXXXXXXXXXXXXXXXXXXXXXXXXXXX",  
    "cardInputType": 1  
  },  
  "reqAmt": "0101",  
  "origTranData": {  
    "tranNr": "000XXXXXXXXX"  
  },  
  "emvTlvReq": "8202XXXX9505XXXXXXXXXX9A03XXXXXX9B..."  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {},  
  "tranData": {  
    "swchKey": "0AFF0E701545A0EB0068023D263487",  
  }  
}
```



```
"tranNr": "000011147981",
"dtTm": "/Date(1461799792000-0700)/",
"amt": "000000000001",
"stan": "001097",
"auth": "TAS789"
},
"cardType": "0",
"mapCaid": "323004201000000",
"merc": {
    "id": "9000",
    "inType": 1
}
}
```

DO NOT COPY



4.18 Settle Void (with mandatory fields)

This transaction is used to cancel a previous Settle Only request not yet closed for settlement, using mandatory fields. This transaction type prevents a transaction from being sent for settlement.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID.	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 6 = Settle Void for Auth and Settle	M
tranFlags.revAuthOnVoid	n1	This flag enables the ability to control the availability of the auth when submitting a settle void request. Valid values: <ul style="list-style-type: none">• 0 = Do not reverse the Auth• 1 = Reverse the Auth	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

**Example Request:**

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 6,  
  "tranFlags": {  
    "revAuthOnVoid": Y,  
  },  
  "origTranData": {  
    "tranNr": "000101000000",  
  },  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {},  
  "tranData": {  
    "swchKey": "0AFF0EDF151141AC022DA6AE59F136",  
    "tranNr": "000010714711",  
    "dtTm": "/Date(1447737676000-0700)/",  
    "amt": "000000000130",  
    "stan": "001080",  
    "auth": "VTLMC1"  
  },  
  "cardType": "1",  
  "mapCaid": "555540492900000",  
  "additionalAmount": [ {  
    "accountType": "30",  
    "amountType": "53",  
    "currencyCode": "840",  
    "amountSign": "D",  
    "amount": "000000000130"  
  }],  
  "merc": {  
    "id": "9000",  
    "inType": 1  
  }  
}
```



4.19 Balance Inquiry

This transaction is used to determine the current balance of a card, using mandatory fields. This transaction type requires track data be sent. Method only available for stored value or pre-paid cards. Other card types return a rspCode of 57 or 92.

NOTE: Fields with an ^ (pos.termld) are required for device-based transactions (Ex: VeriFone, PAX, etc.).

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID.	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 18 = Balance Inquiry (Stored Value or Pre-paid cards only)	M
card.trk1	variable length 1 byte, binary + up to 76 ANS, EBCDIC; maximum 77 bytes	Track Data: This is the track 1 data obtained from the magnetic stripe of the card. Track 1 and/or track 2 required for card present/swipe transactions. All characters must be upper case including format code. indCode must = 1 for retail. Note: Starting and ending sentinels must be removed. For track 1, this includes the "%" and "?" symbols.	M
card.trk2	variable length 1 byte, binary + up to 37 N, 4-bit BCD	Track Data: This is the track 2 data obtained from the magnetic stripe of the card. Track 1 and/or track 2 required for card present/swipe transactions. All characters must be upper case including format code. indCode must = 1 for retail. Note: Starting and ending sentinels must be removed. For track 2, this includes the ";" and "?" symbols.	M
^pos.termld	n4	The 4-digit terminal ID. This is used to construct the Terminal ID field. *Required for device-initiated transactions.	M

Example Request:



```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1  
  },  
  "tranCode": 18,  
  "card": {  
    "trk1": "B4485896261017708^TEST CARD 16 / ^17021011933600163000000",  
    "trk2": "4485896261017708=16051011933616300001",  
  },  
  "pos": {  
    "termId": "0001"  
  }  
}
```

Example Response (showing a card balance of \$4.35):

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {},  
  "tranData": {  
    "swchKey": "0A09071715A1E0FE86F1331DC0F1EF",  
    "tranNr": "000025657681",  
    "dtTm": "/Date(1486563043000-0800)/",  
    "amt": "00000000435",  
    "stan": "098379",  
    "auth": "Lexc05"  
  },  
  "cardType": "0",  
  "mapCaid": "300979940268000"  
}
```



5 Recurring Web Services

The Merchant Web Service functions in this section are used to add or update customers, wallets or recurring profiles using the UpdtRecurrProf method of the Merchant Web Service, except for the last 2, which utilize the RecurrProfFromTran method. Customers, wallets and recurring profiles are unique per Gateway ID.

5.1 Create/Update Customer and Wallet Details

This transaction type is used to add/update a customer and a wallet profile in a single request.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	This is the product type. Valid Values: <ul style="list-style-type: none">• 4 = ACH• 5 = Debit Card/Credit Card	M
cust.type	n1	This is the customer update type. Valid Values: <ul style="list-style-type: none">• 0 = Add• 1 = Update	M
cust.contact.firstName	ans..30	This is the customer's first name. Notes: <ul style="list-style-type: none">• contact.firstName will be ignored if contact.fullName is set.• One of the following is mandatory when adding or updating the contact details for the customer:<ul style="list-style-type: none">○ contact.firstName and contact.lastName○ contact.fullName	O
cust.contact.lastName	ans..30	This is the customer's last name. Notes: <ul style="list-style-type: none">• contact.lastName will be ignored if contact.fullName is set.• One of the following is mandatory when adding or updating the contact details for the customer:<ul style="list-style-type: none">○ contact.firstName and contact.lastName○ contact.fullName	O



cust.contact.fullName	ans..61	<p>This is the customer's full name.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• This is mandatory when merc.prodType = 5 and contact.firstName and contact.lastName are not set.	C
cust.contact.coName	ans..30	This is the customer's company name.	O
cust.contact.phone.type	n1	<p>This is the type of contact number.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C
cust.contact.phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 character.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• - <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	O
cust.contact.addrLn1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification. <p>Note: All fields which already are stored on file must be present at the time of the update. Otherwise, the existing stored data is replaced with null values. You can call the FindRecurrProf web service method to query the stored data on file.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	C



cust.contact.addrLn2	ans..50	<p>This is the customer's street address line 2.</p> <p>Note: All fields which already are stored on file must be present at the time of the update. Otherwise, the existing stored data is replaced with null values. You can call the FindRecurrProf web service method to query the stored data on file.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O
cust.contact.city	ans..40	<p>This is the customer's city.</p> <p>Note: All fields which already are stored on file must be present at the time of the update. Otherwise, the existing stored data is replaced with null values. You can call the FindRecurrProf web service method to query the stored data on file.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O
cust.contact.state	a2	<p>This is the customer's state. Values must be in all CAPS.</p> <p>Note: All fields which already are stored on file must be present at the time of the update. Otherwise, the existing stored data is replaced with null values. You can call the FindRecurrProf web service method to query the stored data on file.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O
cust.contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: All fields which already are stored on file must be present at the time of the update. Otherwise, the existing stored data is replaced with null values. You can call the FindRecurrProf web service method to query the stored data on file.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
cust.contact.ctry	a2	This is the customer's country. The only permitted value is US.	O



cust.contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
cust.contact.type	n1	<p>This is an indicator of where the customer profile information is used.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Recurring	M
cust.contact.stat	n1	<p>This is the status of the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active <p>Conditions:</p> <ul style="list-style-type: none">• This only applies to recurring and wallet web service functions when updating an existing customer, wallet, or recurring record.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.contact.note	ans..100	<p>A free-form notes field associated with the customer.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This only applies to recurring and wallet web service functions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.id	n..9	<p>This is the wallet ID.</p> <p>Conditions:</p> <p>This is required when pmt.type is set to 1.</p>	C
cust.pmt.type	n1	<p>This is the wallet update type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Add• 1 = Update	M



cust.pmt.card.type	n1	<p>This is the type of the card.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = VISA• 1 = MasterCard• 2 = AMEX• 3 = Discover• 4 = Diner's Club• 5 = JCB <p>Condition:</p> <ul style="list-style-type: none">• If dbtOrCdt is set to 0, then this can only be set to 0, 1, or 3.	O
cust.pmt.card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• New or masked card.pan must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: PayPal cards cannot be used to create a wallet</p>	C
cust.pmt.card.xprDt	n4, YYMM	<p>Expiration Date: This is the expiration date of the card.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.card.dbtOrCdt	n1	<p>This indicates whether the card is a debit or credit card.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Credit <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 5.	O
cust.pmt.ordNr	ans..50	<p>This is the customer reference number.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



cust.pmt.ach.bankRtNr	n9	<p>This is the routing number of the customer's bank.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.ach.acctNr	n..17	<p>This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.ach.acctType	n1	<p>Type of customer account.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 4. <p>Note: This element defaults to 0 = Checking.</p>	M
cust.pmt.desc	ans..50	<p>This is the wallet reference number.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



cust.pmt.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular wallet's transactions. Applies to credit card wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO• 2 = eCommerce <p>Note: This is conditional when credit card is selected.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• This field can only be passed and stored at the wallet level when creating /updating a customer and/or wallet only.	C
cust.pmt.status	n1	<p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C

Example Create Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
    "prodType": 0  
  },  
  "cust": {  
    "type": 0,  
    "contact": {  
      "fullName": "Jade TESTJL",  
      "coName": "Test Company",  
  
      "title": "CIO CO",  
      "phone": [  
        {  
          "type": 0,  
          "nr": "3036258000"  
        }  
      ]  
    }  
  }  
}
```



```
],
  "addrLn1": "3036258000",
  "addrLn2": "STE 100",
  "city": "Denver",
  "state": "CO",
  "zipCode": "85284",
  "ctry": "US",
  "email": "test@TSYS.com",
  "type": 1,
  "stat": 1,
  "note": "Test Note",
},
"pmt": [
{
  "card": {
    "type": 0,
    "pan": "4485896261017708",
    "xprDt": "2012",
    "dbtOrCdt": 1,
    "cardInputType": 0
  },
  "ordNr": "Rest Test",
  "desc": "String",
  "indCode": 0,
  "status": 1
}
]
},
```

Example Response:

```
{
  "custId": 15168260600000000000,
  "pmtId": [
    15182140200000000000
  ],
  "rspcode": "00"
}
```

Example Update Request:

```
{
  "merc": {
    "id": "9000",
    "regKey": "REGKEY",
```



```
"inType": 1,  
"prodType": 5  
},  
"cust": {  
    "type": 1,  
    "contact": {  
        "id": "15168260600000000000",  
        "fullName": "NewFirst NewLast",  
        "coName": "NewCompany",  
        "title": "NewTitle",  
        "phone": [  
            {  
                "type": 0,  
                "nr": "3034440000"  
            }  
        ],  
        "addrLn1": "New Address1",  
        "addrLn2": "New Address2",  
        "city": "NewCity",  
        "state": "NewState",  
        "zipCode": "NewZip",  
        "ctry": "US",  
        "email": "NewEmail@Domain.com",  
        "type": 1,  
        "stat": 1,  
        "note": "New Note"  
    },  
    "pmt": [  
        {  
            "id": "15182140200000000000",  
            "type": 1,  
            "card": {  
                "pan": "NewPAN",  
                "xprDt": "2307",  
                "dbtOrCdt": 1,  
            },  
            "ordNr": "New Wallet Customer Reference ID Value",  
            "status": 1  
        }  
    ]  
}
```

Example Response:

{



```
        "rspcode": "00"  
    }
```

DO NOT COPY



5.2 Create Wallet Details

This transaction type is used to add a new wallet to an existing customer id. A customer is required before adding a wallet, and a wallet is required before adding a recurring profile.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	This is the product type. Valid Values: <ul style="list-style-type: none">• 4 = ACH• 5 = Debit Card/Credit Card	M
cust.contact.id	ans..25	This is the existing customer ID associated with this wallet. Conditions: <ul style="list-style-type: none">• Required when pmt.type is set to 1, when adding wallets to an existing contact.id and when updating an existing contact.id.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.type	n1	This is the wallet update type. Valid Values: <ul style="list-style-type: none">• 0 = Add	M



cust.card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• New or masked card.pan must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: PayPal cards cannot be used to create a wallet</p>	C
cust.card.xprDt	n4, YYMM	<p>Expiration Date: This is the expiration date of the card.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.card.dbtOrCdt	n1	<p>This indicates whether the card is a debit or credit card.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Credit <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 5.	O
cust.pmt.ordNr	ans..50	<p>This is the customer reference ID.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.ach.bankRtNr	n9	<p>This is the routing number of the customer's bank.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



cust.ach.acctNr	n..17	<p>This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.ach.acctType	n1	<p>Type of customer account.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 4. <p>Note: This element defaults to 0 = Checking.</p>	M
cust.pmt.desc	ans..50	<p>This is the wallet reference number.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular wallet's transactions. Applies to credit card wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO• 2 = eCommerce <p>Note: This is conditional when credit card is selected.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• This field can only be passed and stored at the wallet level when creating /updating a customer and/or wallet only.	C



cust.pmt.status	n1	<p>This indicates the status of the wallet.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
-----------------	----	--	---

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
    "prodType": 5,  
  },  
  "cust": {  
    "contact": {  
      "id": "14781204200000000000",  
    },  
    "pmt": {  
      "type": 0,  
      "card": {  
        "pan": "4485896261017708",  
        "xprDt": "2012",  
        "dbtOrCdt": 1,  
      },  
      "ordNr": "REST Test CustRefID",  
      "desc": "REST Test Wallet Description",  
      "indCode": 0,  
      "status": 1,  
    },  
  },  
}
```

Example Response:

```
{  
  "pmtId": [  
    15182140200000000000  
  ],  
  "rspcode": "00"  
}
```



5.3 Update Wallet Details

This transaction type is used to update an existing wallet to an existing customer. A customer is required before adding a wallet, and a wallet is required before adding a recurring profile.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	<p>This is the product type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 4 = ACH• 5 = Debit Card/Credit Card	M
cust.contact.id	ans..25	<p>This is the existing customer ID associated with this wallet.</p> <p>Conditions:</p> <ul style="list-style-type: none">• Required when pmt.type is set to 1, when adding wallets to an existing contact.id and when updating an existing contact.id.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.id	n..9	<p>This is the wallet ID.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required when pmt.type is set to 1.	C
cust.pmt.type	n1	<p>This is the wallet update type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Update	M



cust.card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• New or masked card.pan must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.card.xprDt	n4, YYMM	<p>Expiration Date: This is the expiration date of the card.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.card.dbtOrCdt	n1	<p>This indicates whether the card is a debit or credit card.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Credit <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 5.	O
cust.pmt.ordNr	ans..50	<p>This is the customer reference ID.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.ach.bankRtNr	n9	<p>This is the routing number of the customer's bank.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



cust.ach.acctNr	n..17	<p>This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.ach.acctType	n1	<p>Type of customer account.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 4. <p>Note: This element defaults to 0 = Checking.</p>	M
cust.pmt.desc	ans..50	<p>This is the wallet reference number.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular wallet's transactions. Applies to credit card wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO• 2 = eCommerce <p>Note: This is conditional when credit card is selected.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• This field can only be passed and stored at the wallet level when creating /updating a customer and/or wallet only.	C



cust.pmt.status	n1	<p>This indicates the status of the wallet.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
-----------------	----	--	---

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
    "prodType": 5,  
  },  
  "cust": {  
    "contact": {  
      "id": "14781204200000000000",  
    },  
    "pmt": {  
      "id": 14781918000000000000,  
      "type": 1,  
      "card": {  
        "pan": "4485896261017708",  
        "xprDt": "2012",  
        "dbtOrCdt": 1,  
      },  
      "ordNr": "REST Test",  
      "desc": "REST Test Updated Wallet Description",  
      "indCode": 0,  
      "status": 1,  
    },  
  },  
}
```

Example Response:

```
{  
  "rspcode": "00"  
}
```



5.4 Create/Update Recurring Details

This transaction type is used to add a new recurring profile or update an existing recurring profile to an existing customer. A customer with an existing wallet is required before adding a recurring profile.

Note: A recurring profile cannot be updated or reactivated after the payment terms are complete.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
recurProf.recurProfId	n19	This is the recurring profile ID. Conditions: <ul style="list-style-type: none">• This is required when recurProf.type is set to 1.	C
recurProf.type	n1	This is the recurring profile update type. Valid Values: <ul style="list-style-type: none">• 0 = Add• 1 = Update	M
recurProf.recur.recurProfStat	n1	This is the status of the recurring profile. Valid Values: <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) Conditions: <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.dbtOrCdt	n1	This indicates this is a recurring debit (sale) transaction. Valid Values: <ul style="list-style-type: none">• 0 = Debit	M



recurProf.recur.amt	n..12	<p>This is the amount of the recurring transaction (in minor denomination).</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.nrOfPmt	n2	<p>This indicates the number of scheduled payments and only applies to automatic recurring payments. This does not impact a wallet/manual recurring payment.</p> <p>Conditions:</p> <ul style="list-style-type: none">• If this is not set, the payments are scheduled indefinitely.• This must be set to 1 if bIngCyc is set to 90 (Single Payment).• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.startDt	dateTime	<p>This is the date of the first scheduled recurring payment. This is also known as the effective date. Ex: YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time and the date time cannot be set in the past</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.bIngCyc	n2	<p>This is the frequency of the recurring payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 00 = Daily• 10 = Weekly• 20 = Every 2 weeks• 30 = Every 4 weeks• 40 = Every 8 weeks• 51 = Specified day of the month• 52 = Last day of the month• 60 = Every 3 months• 70 = Quarterly• 80 = Yearly• 90 = Single Payment <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recurProf.recur.desc	an..25	This is the recurring profile reference number. Condition: <ul style="list-style-type: none">All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.custId	n..9	This is the existing customer ID associated with this recurring profile.	M
recur.pmtId	n..9	This is the existing wallet ID associated with this recurring profile.	M
recurProf.recur.indCode	n1	This is the Industry Code that overrides the merchant profile information for this particular recurring profile's transactions. Applies to credit card recurring profiles only. Valid Values: <ul style="list-style-type: none">0 = Direct Marketing / MOTO Condition: <ul style="list-style-type: none">All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.ordNr	ans..50	This is the customer reference number of the recurring profile. Condition: <ul style="list-style-type: none">All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.purcOrdnr	ans..50	This is the merchant's purchase order number for the recurring record. Valid Special Characters: <ul style="list-style-type: none">SP Conditions: <ul style="list-style-type: none">This is required for purchase card transactions.All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.	C
recurProf.recur.shipToZipCode	ans..9	This is the ship to zip code. Conditions: <ul style="list-style-type: none">This element is applicable/required for AMEX transactions when shipping products to the cardholder. Note: Hyphen is not allowed for a 9 digit value.	C



usrDef.name	ans..50	This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O
usrDef.val	ans..400 0	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction.</p>	C
recur.seccCode	n1	<p>This identifies the authorization type for the transaction. Applies to ACH wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Internet (WEB)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• This element is only used when merc.prodType = 4.	C

***Example Request:*****(Create)**

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "TBJTRLZQNM8QZHTT",  
    "inType": 1,  
  },  
  "recurProf": {  
    "type": 0,  
    "recur": {  
      "recurProfStat": 1,  
      "dbtOrCdt": 0,  
      "amt": "02400",  
      "nrOfPmt": 3,  
      "StartDt": "2016-11-11T00:00:00.000-06:00",  
      "blngCyc": "70",  
      "desc": "REST Recurring Prof Desc",  
      "custId": "1478120429418150411",  
      "pmtlId": "1478120429418140051",  
      "indCode": 0,  
      "ordNr": "REST Test Rec CustRefID",  
      "shipToZipCode": "80000",  
    },  
  },  
}
```

Example Response:

```
<id>1478195211567192741</id>  
<rspCode>00</rspCode>
```

Example Request:**(Update)**

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "TBJTRLZQNM8QZHTT",  
    "inType": 1,  
  },  
  "recurProf": {  
    "recurProfId": "1478195211567192741",  
    "type": 1,  
    "recur": {  
      "recurProfStat": 1,
```



```
"dbtOrCdt": 0,  
"amt": "01500",  
"nrOfPrmt": 5,  
"StartDt": "2016-11-11T00:00:00.000-06:00",  
"blngCyc": "70",  
"desc": "REST Recur Prof Desc Updt",  
"custId": "1478120429418150411",  
"pmtId": "1478120429418140051",  
"indCode": 0,  
"ordNr": "Recurring CustRefID Updt",  
"shipToZipCode": "80001",  
,  
,  
}
```

Example Response:

```
{  
"rspcode": "00"  
}
```

DO NOT COPY



5.5 Create/Update Customer, Wallet, Recurring Details

This transaction type is used to add/update a customer, wallet and recurring profile in a single request.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	This is the product type. Valid Values: <ul style="list-style-type: none">• 4 = ACH• 5 = Debit Card/Credit Card	M
cust.type	n1	This is the customer update type. Valid Values: <ul style="list-style-type: none">• 0 = Add• 1 = Update	M
cust.contact.firstName	ans..30	This is the customer's first name. Notes: <ul style="list-style-type: none">• contact.firstName will be ignored if contact.fullName is set.• One of the following is mandatory when adding or updating the contact details for the customer:<ul style="list-style-type: none">○ contact.firstName and contact.lastName○ contact.fullName	O
cust.contact.lastName	ans..30	This is the customer's last name. Notes: <ul style="list-style-type: none">• contact.lastName will be ignored if contact.fullName is set.• One of the following is mandatory when adding or updating the contact details for the customer:<ul style="list-style-type: none">○ contact.firstName and contact.lastName○ contact.fullName	O
cust.contact.fullName	ans..61	This is the customer's full name. Conditions: <ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M



cust.contact.coName	ans..30	This is the customer's company name.	O
cust.contact.phone.type	n1	<p>This is the type of contact number.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C
cust.contact.phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 character.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• - <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	O
cust.contact.addrLn1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	C
cust.contact.addrLn2	ans..50	<p>This is the customer's street address line 2.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O
cust.contact.city	ans..40	<p>This is the customer's city.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O
cust.contact.state	a2	<p>This is the customer's state. Values must be in all CAPS.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O



cust.contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
cust.contact.ctry	a2	This is the customer's country. The only permitted value is US.	O
cust.contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
cust.contact.type	n1	<p>This is an indicator of where the customer profile information is used.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Recurring	M
cust.contact.stat	n1	<p>This is the status of the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active <p>Conditions:</p> <ul style="list-style-type: none">• This only applies to recurring and wallet web service functions when updating an existing customer, wallet, or recurring record.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



cust.contact.note	ans..100	A free-form notes field associated with the customer. Conditions: <ul style="list-style-type: none">• This only applies to recurring and wallet web service functions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.type	n1	This is the wallet update type. Valid Values: <ul style="list-style-type: none">• 0 = Add• 1 = Update	M
cust.pmt.card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe. Conditions: <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• New or masked card.pan must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. Note: PayPal cards cannot be used to create a wallet	C
cust.pmt.card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card. Conditions: <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.card.dbtOrCdt	n1	This indicates whether the card is a debit or credit card. Valid Values: <ul style="list-style-type: none">• 1 = Credit Conditions: <ul style="list-style-type: none">• This element is only used when merc.prodType = 5.	O
cust.pmt.ordNr	ans..50	This is the customer reference number. Conditions: <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



cust.ach.bankRtNr	n9	<p>This is the routing number of the customer's bank.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.ach.acctNr	n..17	<p>This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.ach.acctType	n1	<p>Type of customer account.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 4. <p>Note: This element defaults to 0 = Checking.</p>	M
cust.pmt.desc	ans..50	<p>This is the wallet reference number.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
cust.pmt.status	n1	<p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.type	n1	<p>This is the recurring profile update type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Add• 1 = Update	M



recurProf.recur.recurProf.recurStat	n1	<p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.dbtOrCdt	n1	<p>This indicates whether this is a recurring debit (sale) transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Debit	M
recurProf.recur.amt	n..8	<p>This is the amount of the recurring transaction (in minor denomination).</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.nrOfPmt	n2	<p>This indicates the number of scheduled payments and only applies to automatic recurring payments. This does not impact a wallet/manual recurring payment.</p> <p>Conditions:</p> <ul style="list-style-type: none">• If this is not set, the payments are scheduled indefinitely.• This must be set to 1 if bIngCyc is set to 90 (Single Payment).• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.startDt	dateTime	<p>This is the date of the first scheduled recurring payment. This is also known as the effective date. Ex: YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time and the date time cannot be set in the past</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recurProf.recur.blngCyc	n2	<p>This is the frequency of the recurring payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 00 = Daily• 10 = Weekly• 20 = Every 2 weeks• 30 = Every 4 weeks• 40 = Every 8 weeks• 51 = Specified day of the month• 52 = Last day of the month• 60 = Every 3 months• 70 = Quarterly• 80 = Yearly• 90 = Single Payment <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.desc	an..25	<p>This is the recurring profile reference number.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular recurring profile's transactions. Applies to credit card recurring profiles only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.ordNr	ans..50	<p>This is the customer reference number of the recurring profile.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recurProf.recur.purcOrdNr	ans..50	<p>This is the merchant's purchase order number for the recurring record.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
recurProf.recur.shipToZipCode	Ans..9	<p>This is the ship to zip code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is applicable/required for AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
usrDef.name	ans..50	<p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef.val	ans..4000	<p>This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.</p>	O
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C



tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction.</p>	C
recur.seccCode	n1	<p>This identifies the authorization type for the transaction. Applies to ACH wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Internet (WEB)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• This element is only used when merc.prodType = 4.	C

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
    "prodType": 5  
  },  
  "cust": {  
    "type": 0,  
    "contact": {  
      "fullName": "TestFirst Test MI TestLast",  
      "coName": "Test Company",  
      "title": "CIO CO",  
      "phone": [  
        {  
          "type": 0,  
          "nr": "3036250000"  
        }  
      ]  
    }  
  }  
}
```



```
        ],
        "addrLn1": "8320 Main",
        "addrLn2": "STE 100",
        "city": "Denver",
        "state": "CO",
        "zipCode": "85284",
        "ctry": "US",
        "email": "test@test.com",
        "type": 1,
        "stat": 1,
        "note": "TEST NOTE",
    },
    "pmt": [
        {
            "type": 0,
            "card": {
                "pan": "4485896261017708",
                "xprDt": "2012",
                "dbtOrCdt": 1,
            },
            "ordNr": "REST Cust Ref Id Value",
            "desc": "REST Wallet Ref Value",
            "status": 1
        }
    ]
},
"recurProf": {
    "type": 0,
    "recur": {
        "recurProfStat": 1,
        "dbtOrCdt": 0,
        "amt": "0100",
        "nrOfPmt": 11,
        "startDt": "2018-02-24T00:00:00.000-06:00",
        "bInGcyc": 10,
        "desc": "Recurring Ref Value",
        "indCode": 0,
        "ordNr": "REST Recurring CustRefID",
        "shipToZipCode": "99876",
    }
},  
}
```

Example Response:

```
{  
    "id": 15168260500000000000,
```



```
"custId": 15168260600000000000,  
"pmtId": [  
    15182140200000000000  
,  
    "rspCode": "00"  
}
```

DO NOT COPY



5.6 Update Customer

This transaction type is used to update a customer to an inactive status that in turn deactivates all wallet and recurring id profiles in a single request.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
contact.id	n25	This is the existing customer ID associated with this wallet. Conditions: <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
contact.firstName	ans..30	This is the customer's first name. Notes: <ul style="list-style-type: none">• contact.firstName will be ignored if contact.fullName is set.• One of the following is mandatory when adding or updating the contact details for the customer:<ul style="list-style-type: none">◦ contact.firstName and contact.lastName◦ contact.fullName	O
contact.lastName	ans..30	This is the customer's last name. Notes: <ul style="list-style-type: none">• contact.lastName will be ignored if contact.fullName is set.• One of the following is mandatory when adding or updating the contact details for the customer:<ul style="list-style-type: none">◦ contact.firstName and contact.lastName◦ contact.fullName	O
contact.fullName	ans..61	This is the customer's full name. Conditions: <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M



contact.type	n1	This is an indicator of where the customer profile information is used. Valid Values: <ul style="list-style-type: none">• 1 = Recurring	M
contact.stat	n1	This is the status of the customer. Valid Values: <ul style="list-style-type: none">• 0 = Inactive	M

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "contact": {  
    "id": "14781967300000000000",  
    "fullName": "TestFirst Test MI TestLast",  
    "type": 1,  
    "stat": 0,  
  },  
}
```

Example Response:

```
{  
  "rspCode": "00"  
}
```



5.7 Create Customer and Wallet Details with Transaction Number (tranNr)

This transaction type is used to create a customer and wallet by using the transaction number returned on an approved credit card sale, or an approved ACH transaction where the transaction may have been executed at any time in the last 13 months. Note: This method uses the RecurrProfFromTran call.

IMPORTANT Development Note: After successfully creating the customer and wallet, you will need to submit an update call to add the address and zip code to the customer profile for card not present qualification.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
type	n..1	This is an indicator of where the customer profile information is used. Valid Values: <ul style="list-style-type: none">• 1 = Recurring	M
tranNr	n..19	Unique ID generated when the original sale transaction is processed. The TranNr received in the transaction response corresponds/maps to the transaction id required for this report.	M

Example Request:

```
{
  "merc": {
    "id": "9000",
    "regKey": "REGKEY",
    "inType": 1,
  },
  "type": 1,
  "tranNr": "12901971",
}
```



Example Response:

```
{  
    "custId": 15168260600000000000,  
    "pmtId": [  
        15182140200000000000  
    ],  
    "rspcode": "00"  
}
```

DO NOT COPY



5.8 Create Customer, Wallet and Recurring Details with Transaction Number (tranNr)

This transaction type is used to create a customer, wallet and recurring detail by using the transaction number returned on an approved credit card sale, an approved ACH transaction where the transaction may have been executed at any time in the last 13 months. Note: This method uses the RecurrProfFromTran call.

IMPORTANT Development Note: After successfully creating the customer, wallet and recurring tokens, you will need to submit an update call to add the address and zip code to the customer profile for card not present qualification.

This feature is currently unavailable for card not present transactions/hand keyed.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranNr	n..19	Unique ID generated when the original sale transaction is processed. The TranNr received in the transaction response corresponds/maps to the transaction id required for this report.	M
recurProf.recurProfId	n19	This is the recurring profile ID. Conditions: <ul style="list-style-type: none">• This is required when recurProf.type is set to 1.	C
recurProf.type	n1	This is the recurring profile update type. Valid Values: <ul style="list-style-type: none">• 0 = Add	M
recurProf.recur.recurProfStat	n1	This is the status of the recurring profile. Valid Values: <ul style="list-style-type: none">• 1 = Active (Default) Conditions: <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recurProf.recur.dbtOrCdt	n1	<p>This indicates this is a recurring debit (sale) transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Debit	M
recurProf.recur.amt	n..12	<p>This is the amount of the recurring transaction (in minor denomination).</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.nrOfPmt	n2	<p>This indicates the number of scheduled payments and only applies to automatic recurring payments. This does not impact a wallet/manual recurring payment.</p> <p>Conditions:</p> <ul style="list-style-type: none">• If this is not set, the payments are scheduled indefinitely.• This must be set to 1 if bIngCyc is set to 90 (Single Payment).• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.startDt	dateTime	<p>This is the date of the first scheduled recurring payment. This is also known as the effective date. Ex: YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time and the date time cannot be set in the past</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recurProf.recur.blngCyc	n2	<p>This is the frequency of the recurring payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 00 = Daily• 10 = Weekly• 20 = Every 2 weeks• 30 = Every 4 weeks• 40 = Every 8 weeks• 51 = Specified day of the month• 52 = Last day of the month• 60 = Every 3 months• 70 = Quarterly• 80 = Yearly• 90 = Single Payment <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.desc	an..25	<p>This is the recurring profile reference number.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular recurring profile's transactions. Applies to credit card recurring profiles only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.recur.ordNr	ans..50	<p>This is the customer reference number of the recurring profile.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recurProf.recur.purcOr dNr	ans..50	<p>This is the merchant's purchase order number for the recurring record.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
recurProf.recur.shipTo ZipCode	ans..9	<p>This the ship to zip code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is applicable/required for AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
usrDef.name	ans..50	<p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef.val	ans..400 0	<p>This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.</p>	O
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C



tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • No special characters are allowed. • A leading zero is required. • This is required for purchase card transactions. • All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction.</p>	C
recur.seccCode	n1	<p>This identifies the authorization type for the transaction. Applies to ACH wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 1 = Internet (WEB) • 2 = Business to Consumer (PPD) • 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none"> • All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. • This element is only used when merc.prodType = 4. 	C

Example Request:

```
{
  "merc": {
    "id": "9000",
    "regKey": "REGKEY",
    "inType": 1,
  },
  "tranNr": "12913311",
  "recurProf": {
    "type": 0,
    "recur": {
      "recurProfStat": 1,
      "dbtOrCdt": 0,
      "amt": "01500",
      "nrOfPmt": 5,
      "StartDt": "2016-11-11T00:00:00.000-06:00",
      "blngCyc": "70",
      "desc": "REST Recur Prof Desc",
      "indCode": 0,
    }
  }
}
```



```
"ordNr": "Recurring CustRefID Updt",
"shipToZipCode": "80001",
},
},
}
```

Example Response:

```
{
    "id": 15168260500000000000,
    "custId": 15168260600000000000,
    "pmtId": [
        15182140200000000000
    ],
    "rspcode": "00"
}
```

DO NOT COPY



6 ACH Web Services

The web services calls in this section are used for sending standard ACH transactions (such as ACH Debit, ACH Credit, ACH Cancel/Refund, using the SendTran method of the Merchant Web Service.

Note: ACH daily settlement time starts at 4PM PST.

6.1 ACH Debit (with mandatory fields)

This transaction performs an ACH Debit in a single request using only mandatory fields.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 11 = ACH Debit	M
contact.fullName	ans.61	<ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
achEcheck.bankRtNr	n9	This is the routing number of the customer's bank.	M



achEcheck.acctNr	n..17	This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.	M
achEcheck.acctType	n1	Valid Values: <ul style="list-style-type: none">• 0 = Checking• 1 = Savings Note: This element defaults to 0 = Checking.	O
achEcheck.seccCode	A3	This identifies the authorization type for the ACH transaction. Valid Values: <ul style="list-style-type: none">• 0 = Telephone (TEL)• 1 = Internet (WEB)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD) Conditions: <ul style="list-style-type: none">• If set here, it overrides the value in the Merchant Profile.	O

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 11,  
  "contact": {  
    "fullName": "John Doe",  
  },  
  "reqAmt": "123",  
  "achEcheck": {  
    "bankRtNr": "121212120",  
    "acctNr": "987654321",  
    "seccCode": 0,  
  },  
}
```

***Example Response:***

```
{  
    "rspCode": "00",  
    "rspCodeMsg": "Approved or completed successfully",  
    "authRsp": {"gwyTranId": "1797713774"},  
    "tranData": {  
        "swchKey": "0AFF0E701549C99B45CE731FB202CD",  
        "tranNr": "000011203131",  
        "dtTm": "/Date(1462916200000-0700)/",  
        "amt": "000000000123",  
        "stan": "001406"  
    },  
    "achResponse": {  
        "Message": "Transaction processed.",  
        "Note": [  
            "PrevPay: nil +0",  
            "Score: 100/100"  
        ]  
    },  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```

Example Error Response:

```
{  
    "rspCode": "06",  
    "rspCodeMsg": "Error",  
    "authRsp": {},  
    "tranData": {  
        "swchKey": "0AFF0E701545A1805951F2D2526397",  
        "tranNr": "000011148011",  
        "dtTm": "/Date(1461800425000-0700)/",  
        "amt": "000000000123",  
        "stan": "001098"  
    },  
    "achResponse": {"Message": "Connection to https://test.CheckGateway.com refused"},  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```



6.2 ACH Debit (with conditional and optional fields)

This transaction performs an ACH Debit in a single request, using conditional and optional fields.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	<p>Product Type: This is the product type for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 4 = ACH	O
tranCode	n..2	<p>Transaction Code: This indicates the type of transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 11 = ACH Debit	M
contact.fullName	ans..61	<ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
contact.coName	ans..30	This is the customer's company name.	O
contact.title	as..10	<p>This is the customer's title.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field.</p>	O



contact.phone.type	n1	<p>This is the type of customer phone number.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a contact phone number is provided.	C
contact.phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• - <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	O
contact.addrLn1	ans..50	This is the customer's street address line 1.	O
contact.addrLn2	ans..50	This is the customer's street address line 2.	O
contact.city	ans..40	This is the customer's city.	O
contact.state	a2	This is the customer's state. Values must be in all CAPS.	O
contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O
contact.ctry	a2	This is the customer's country. The only permitted value is US.	O



contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
contact.ship.fullName	ans..61	This is the customer's full name for shipping purposes.	O
contact.ship.addrLn1	ans..50	This is the shipping street address line 1.	O
contact.ship.addrLn2	ans..50	This is the shipping street address line 2.	O
contact.ship.city	ans..40	This is the shipping city.	O
contact.ship.state	a2	This is the shipping state. Values must be in all CAPS.	O
contact.ship.zipCode	ans..9	<p>This is the shipping ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O
contact.ship.phone	ans..12	<p>This is the shipping phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	O
contact.ship.email	ans..75	<p>This is the shipping email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O



reqAmt	n..8	<p>This contains the amount associated with this transaction in minor denominations.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef. name	ans..50	<p>This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call.</p> <p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef. val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
tranFlags.dupChkTmPrd	n..7	This indicates the window of time in seconds after a transaction is submitted during which the Merchant Web Service checks for a duplicate transaction.	O
authReq.ordNr	ans..50	<p>This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions.</p> <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p>	O
achEcheck.achAcctInfo	ans..10	<p>This is the description to use on all ACH transactions.</p> <p>Valid special characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field.</p>	O
achEcheck.bankRtNr	n9	This is the routing number of the customer's bank.	M
achEcheck.acctNr	n..17	<p>This is the customer's checking/savings account number.</p> <p>Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p>	M
achEcheck.acctType	n1	<p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Note: This element defaults to 0 = Checking.</p>	O



achEcheck.seccCode	n1	<p>This identifies the authorization type for the ACH transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Telephone (TEL)• 1 = Internet (WEB)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none">• If set here, it overrides the value in the Merchant Profile.	C
achEcheck.dtBirth	mmddyy y	<p>Specifies the customer's date of birth.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used if achEcheck.fraudChk = 1. <p>Note: Please refer to ACH Fraud Check Values for additional information.</p>	C

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 11,  
  "contact": {  
    "fullName": "John Doe",  
    "phone": [  
      {  
        "type": 3,  
        "nr": 5551114444,  
      },  
    ],  
    "addrLn1": "123 Test ST",  
    "city": "Denver",  
    "state": "CO",  
    "zipCode": "80021",  
    "email": "info@email.com",  
    "ship": {  
      "addrLn1": "Jane Doe",  
      "addrLn2": "123 Main St",  
      "city": "Denver",  
      "state": "CO",  
    }  
  }  
}
```



```
        "zipCode": "80021",
        "phone": "3037779899",
        "email": "support@email.com",
    },
},
"reqAmt": "123",
"indCode": 0,
"achEcheck": {
    "bankRtNr": "121212120",
    "acctNr": "987654321",
    "acctType": 0,
    "seccCode": 0,
},
}
```

Example Response:

```
{
    "rspCode": "00",
    "rspCodeMsg": "Approved or completed successfully",
    "authRsp": {"gwyTranId": "1797713774"},
    "tranData": {
        "swchKey": "0AFF0E701549C99B45CE731FB202CD",
        "tranNr": "000011203131",
        "dtTm": "/Date(1462916200000-0700)/",
        "amt": "00000000123",
        "stan": "001406"
    },
    "achResponse": {
        "Message": "Transaction processed.",
        "Note": [
            "PrevPay: nil +0",
            "Score: 100/100"
        ]
    },
    "merc": {
        "id": "9000",
        "inType": 1
    }
}
```

Example Error Response:

```
{
    "rspCode": "06",
    "rspCodeMsg": "Error",
    "authRsp": {},
    "tranData": {
        "swchKey": "0AFF0E701545A1805951F2D2526397",

```



```
"tranNr": "000011148011",
"dtTm": "/Date(1461800425000-0700)/",
"amt": "000000000123",
"stan": "001098"
},
"achResponse": {"Message": "Connection to https://test.CheckGateway.com refused"},
"merc": {
  "id": "9000",
  "inType": 1
}}
```

DO NOT COPY



6.3 Blind Credit (with mandatory fields)

This transaction type is used to issue a credit (refund) to an account that does not have a corresponding debit/sale transaction, using mandatory fields only. Due to risks associated with this transaction type, merchants are required to obtain approval from TSYS prior to performing blind credit transactions.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 12 = ACH Blind Credit	M
contact.fullname	ans.61	<ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
achEcheck.bankRtNr	n9	This is the routing number of the customer's bank.	M
achEcheck.acctNr	n..17	This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.	M
achEcheck.acctType	n1	Valid Values: <ul style="list-style-type: none">• 0 = Checking• 1 = Savings Note: This element defaults to 0 = Checking.	O



achEcheck.seccCode	n1	<p>This identifies the authorization type for the ACH transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Telephone (TEL)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none">• If set here, it overrides the value in the Merchant Profile.	0
--------------------	----	---	---

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  
  },  
  "tranCode": 12,  
  "contact": {  
    "fullName": "John Doe",  
  
  },  
  "reqAmt": "123",  
  
},  
"achEcheck": {  
  "bankRtNr": "121212120",  
  "acctNr": "987654321",  
  "seccCode": 0,  
},  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {"gwyTranId": "1797713775"},  
  "tranData": {  
    "swchKey": "0AFF0E701549C9C8288B4BA17DDEA5",  
    "tranNr": "000011203141",  
    "dtTm": "/Date(1462916383000-0700)/",  
  },  
}
```



```
"amt": "000000000123",
"stan": "001407"
},
"achResponse": {
  "Message": "Credit processed.",
  "Note": [
    "PrevPay: nil +0",
    "Score: 100/100"
  ]
},
"merc": {
  "id": "9000",
  "inType": 1
}
}
```

DO NOT COPY



6.4 Blind Credit (with conditional and optional fields)

This transaction type is used to issue a credit (refund) to an account that does not have a corresponding debit/sale transaction, using conditional and optional fields. Due to risks associated with this transaction type, merchants are required to obtain approval from TSYS prior to performing blind credit transactions.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	<p>Product Type: This is the product type for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 4 = ACH	O
tranCode	n..2	<p>Transaction Code: This indicates the type of transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 12 = ACH Blind Credit	M
contact.fullName	ans..61	<ul style="list-style-type: none">• This is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
contact.coName	ans..30	This is the customer's company name.	O
contact.title	as..10	<p>This is the customer's title.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field.</p>	O



contact.phone.type	n1	<p>This is the type of customer phone number.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C
contact.phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• - <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	O
contact.addrLn1	ans..50	This is the customer's street address line 1.	O
contact.addrLn2	ans..50	This is the customer's street address line 2.	O
contact.city	ans..40	This is the customer's city.	O
contact.state	a2	This is the customer's state. Values must be in all CAPS.	O
contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O
contact.ctry	a2	This is the customer's country. The only permitted value is US.	O



contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
contact.ship.fullName	ans..61	This is the customer's full name for shipping purposes.	O
contact.ship.addrLn1	ans..50	This is the shipping street address line 1.	O
contact.ship.addrLn2	ans..50	This is the shipping street address line 2.	O
contact.ship.city	ans..40	This is the shipping city.	O
contact.ship.state	a2	This is the shipping state. Values must be in all CAPS.	O
contact.ship.zipCode	ans..9	<p>This is the shipping ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O
contact.ship.phone	ans..12	<p>This is the shipping phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	O
contact.ship.email	ans..75	<p>This is the shipping email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O



reqAmt	n..8	<p>This contains the amount associated with this transaction in minor denominations.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef. name	ans..50	<p>This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call.</p> <p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef. val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
tranFlags.dupChkTmPrd	n..7	This indicates the window of time in seconds after a transaction is submitted during which the Merchant Web Service checks for a duplicate transaction.	O
authReq.ordNr	ans..50	<p>This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions.</p> <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p>	O
achEcheck.achAcctInfo	ans..10	<p>This is the description to use on all ACH transactions.</p> <p>Valid special characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field.</p>	O
achEcheck.bankRtNr	n9	This is the routing number of the customer's bank.	M



achEcheck.acctNr	n..17	This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.	M
achEcheck.acctType	n1	Valid Values: <ul style="list-style-type: none">• 0 = Checking• 1 = Savings Note: This element defaults to 0 = Checking.	O
achEcheck.seccCode	n1	This identifies the authorization type for the ACH transaction. Valid Values: <ul style="list-style-type: none">• 0 = Telephone (TEL)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD) Conditions: <ul style="list-style-type: none">• If set here, it overrides the value in the Merchant Profile.	C

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 12,  
  "contact": {  
    "fullName": "John Doe",  
    "phone": [  
      {  
        "type": 3,  
        "nr": 5551114444,  
      },  
    ],  
    "addrLn1": "123 Test ST",  
    "city": "Denver",  
    "state": "CO",  
    "zipCode": "80021",  
    "email": "info@email.com",  
    "ship": {  
    }  
  }  
}
```



```
"addrLn1": "Jane Doe",
"addrLn2": "123 Main St",
"city": "Denver",
"state": "CO",
"zipCode": "80021",
"phone": "3037779899",
"email": "support@emial.com",
},
},
"reqAmt": "123",
"achEcheck": {
"bankRtNr": "121212120",
"acctNr": "987654321",
"acctType": 0,
"seccCode": 2,
},
}
```

Example Response:

```
{
"rspCode": "00",
"rspCodeMsg": "Approved or completed successfully",
"authRsp": {"gwyTranId": "1797713775"},
"tranData": {
"swchKey": "0AFF0E701549C9C8288B4BA17DDEA5",
"tranNr": "000011203141",
"dtTm": "/Date(1462916383000-0700)/",
"amt": "000000000123",
"stan": "001407"
},
"achResponse": {
"Message": "Credit processed.",
"Note": [
"PrevPay: nil +0",
"Score: 100/100"
]
},
"merc": {
"id": "9000",
"inType": 1
}
}
```



6.5 ACH Cancel

This transaction performs an ACH Cancel in a single request.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 16 = ACH Cancel Note: This transaction code refunds or voids the transaction. Whether it is a refund or void depends upon the transaction status.	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

Example Request:

```
{
  "merc": {
    "id": "9000",
    "regKey": "REGKEY",
    "inType": 1,
  },
  "tranCode": 16,
  "origTranData": {
    "tranNr": "000010717001",
  },
}
```



Example Response:

```
{  
    "rspCode": "00",  
    "rspCodeMsg": "Approved or completed successfully",  
    "authRsp": {"gwyTranId": "1797713774"},  
    "tranData": {  
        "swchKey": "0AFF0E701549CA04A11D3F8AF200A4",  
        "tranNr": "000011203131",  
        "dtTm": "/Date(1462916631000-0700)/",  
        "amt": "000000000123",  
        "stan": "001408"  
    },  
    "achResponse": {  
        "Message": "Transaction Cancelled.",  
        "Note": [  
            "PrevPay: nil +0",  
            "Score: 100/100",  
            "Cancellation Notes: RefNumber:11203131"  
        ]  
    },  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    }  
}
```

DONOTCOPY



6.6 ACH Refund

This transaction performs an ACH full refund in a single request.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 16 = ACH Refund Note: This transaction code refunds or voids the transaction. Whether it is a refund or void depends upon the transaction status.	M
usrDef. name	ans..50	This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call. This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O
usrDef. val	ans..400 0	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
authReq.ordNr	ans..50	This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions. Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.	O
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M



Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
  },  
  "tranCode": 16,  
  "origTranData": {  
    "tranNr": "000010717001",  
  },  
}
```

Example Response:

```
{  
  "rspCode": "00",  
  "rspCodeMsg": "Approved or completed successfully",  
  "authRsp": {"gwyTranId": "1797713774"},  
  "tranData": {  
    "swchKey": "0AFF0E701549CA04A11D3F8AF200A4",  
    "tranNr": "000011203131",  
    "dtTm": "/Date(1462916631000-0700)/",  
    "amt": "000000000123",  
    "stan": "001408"  
  },  
  "achResponse": {  
    "Message": "Transaction refunded.",  
    "Note": [  
      "PrevPay: nil +0",  
      "Score: 100/100",  
      "Refund Notes: RefNumber:11203131"  
    ]  
  },  
  "merc": {  
    "id": "9000",  
    "inType": 1  
  }  
}
```



6.7 Wallet Sale (with mandatory fields)

This transaction type is used to perform a sale transaction against an existing manual recurring profile (aka wallet), using mandatory fields only.

Element	Type	Description	M/C
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 14 = Recurring(Manual)	
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
recurMan.id	n..19	This is the Wallet ID.	M

Example Request:

```
{
  "merc": {
    "id": "9000",
    "regKey": "REGKEY",
    "inType": 1,
  },
  "tranCode": 14,
  "reqAmt": "112",
  "recurMan": {
    "id": 13152702900000000000,
  },
}
```



Example Response:

```
{  
    "rspCode": "00",  
    "rspCodeMsg": "Approved or completed successfully",  
    "authRsp": {"gwyTranId": "1797713776"},  
    "tranData": {  
        "swchKey": "0AFF0E701549CA8C22C886B5810DE5",  
        "tranNr": "000011203181",  
        "dtTm": "/Date(1462917186000-0700)/",  
        "amt": "000000000112",  
        "stan": "001411"  
    },  
    "achResponse": {  
        "Message": "Transaction processed.",  
        "Note": [  
            "PrevPay: nil +0",  
            "Score: 100/100"  
        ]  
    },  
    "merc": {  
        "id": "9000",  
        "inType": 1  
    },  
    "authReq": {"ordNr": "ACH JSONTEST"}  
}
```



6.8 Wallet Sale (with mandatory and conditional fields)

This transaction type is used to perform a sale transaction against an existing manual recurring profile (aka wallet), using conditional and optional fields.

Element	Type	Description	M/C
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
merc.prodType	n1	This is the product type for this particular transaction. Valid Values: <ul style="list-style-type: none">• 4 = ACH	O
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 14 = Recurring (Manual)	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef.name	ans..50	This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O
usrDef.val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
authReq.ordNr	ans..50	This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions. Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.	O
recurMan.id	n..19	This is the Wallet ID.	M



recurMan.seccCode	n1	This identifies the authorization type for the ACH transaction. Applies to ACH wallets only. Valid values: <ul style="list-style-type: none">• 0 = Telephone (TEL)• 1 = Internet (WEB)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD)	C
-------------------	----	---	---

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "REGKEY",  
    "inType": 1,  
    "prodType": 4  
  },  
  "tranCode": 14,  
  "reqAmt": "130",  
  "usrDef": [  
    {  
      "name": "Birth_Date",  
      "val": "09221977"  
    },  
    {  
      "name": "Invoice",  
      "val": "12345-01"  
    }  
  ],  
  "authReq": {  
    "ordNr": "JSON TEST",  
  },  
  "recurMan": {  
    "id": 146291715000000000,  
    "seccCode": 0,  
  },  
}
```



Example Response:

```
{  
    "rspCode": "00",  
    "rspCodeMsg": "Approved or completed successfully",  
    "authRsp": {  
        "avsRslt": "N",  
        "tranId": "000000000008926",  
        "valCode": "AV "  
    },  
    "tranData": {  
        "swchKey": "0A09071716C2AD245DDBD195C4BF07",  
        "tranNr": "000047014941",  
        "dtTm": "/Date(1564086519000-0700)/",  
        "amt": "000000000130",  
        "stan": "004667",  
        "auth": "TAS624"  
    },  
    "cardType": "0",  
    "mapCaid": "300979940268000"  
}
```

DO NOT COPY



7 Universal Batch File Format Specification

Note: As PayPal cards are only allowed on card present transactions, they are not allowed for the Batch Integration Method.

7.1 Batch File Information

7.1.1 Line Delineation

Lines of the batch file are separated by the newline character (\n), and, as such, no newline characters should be found anywhere in the data except to indicate the end of a data element. Thus, an input file may appear as:

```
<HEADER>\n<BODY RECORD 1>\n<BODY RECORD 2>\n<BODY RECORD  
...N>\n<TRAILER>
```

File Structure

The example below shows the order of the records in a file.

File Header

Detail Record 1

Detail Record 2

Detail Record 3

File Trailer

7.1.2 File Format

The batch file should be saved with a .txt file extension using the following naming convention.

YYMMDDNN.TXT

Key

YY = Year, MM = Month, DD = Day, and NN = Batch #

Note: This is a suggested naming convention. The file extension is required to be in a text file type as the application will only read text format. The text file should be in UBF (Universal TXP Batch file format) format.

7.1.3 Batch Engine

Recurring Processing Engine runs on the :25 and :55 minute of the hour and Batch processing is every minute.



7.1.4 Request and Response Examples

Batch response files include a copy of the original batch request. All sensitive data is masked.

Note: Batch response codes can be found in the appendix section. It is important to review the response file and confirm the individual records processed successfully.

The examples below show the format of the detail record request and response.

Request

Credit Card Auth/Settle:

```
1:<?xml version="1.0" encoding="UTF-8"?><SendTranRequest  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/"><merc><id>7777777732</id><inType>2</inType  
></merc><tranCode>01</tranCode><card><pan>4111*****1111</pan><xprDt>1712</xprDt></card><contact  
><fullName>Jane Smith</fullName><addrLn1>123 Test  
St.</addrLn1><city>Denver</city><state>CO</state><zipCode>80027</zipCode></contact><reqAmt>0000000000  
05</reqAmt><usrDef><name>Miscellaneous Field  
1</name><val>invoicenum</val></usrDef><usrDef><name>Miscellaneous Field  
2</name><val>invoicenum2</val></usrDef><indCode>0</indCode><authReq><ordNr>CustomerRefID</ordNr></  
authReq></SendTranRequest>
```

ACH Debit Sale:

```
2:<?xml version="1.0" encoding="UTF-8"?><SendTranRequest  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/"><merc><id>7777777732</id><inType>2</inType  
></merc><tranCode>11</tranCode><contact><fullName>asdfsdf</fullName></contact><reqAmt>1712</reqAmt>  
<achEcheck><bankRtNr>121212120</bankRtNr><acctNr>*****7890</acctNr><acctType>0</acctType><seccCode  
>2</seccCode></achEcheck></SendTranRequest>
```

Response

Credit Card Approved Response:

```
1:<?xml version="1.0" encoding="UTF-8"?><SendTranResponse  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/"><rspCode>00</rspCode><rspCodeMsg>Approved  
or completed successfully</rspCodeMsg><authRsp><secRslt>M</secRslt><avsRslt>Y</avsRslt>  
  
<aci>V</aci><tranId>283233834299158</tranId><valCode>3JNH</valCode><comCardType>BUSINESS</comCardT  
ype></authRsp><tranData><swchKey>9090541273-000002-1-  
7585</swchKey><tranNr>000052570831</tranNr><dtTm>2013-08-21T16:10:28.000-  
07:00</dtTm><amt>000000000001</amt><stan>053980</stan><auth>570831</auth></tranData><cardType>0</  
cardType><mapCaid>30097999999000</mapCaid></SendTranResponse>
```

ACH Approved Response:



```
2:<?xml version="1.0" encoding="UTF-8"?><SendTranResponse  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/"><rspCode>00</rspCode>><rspCodeMsg>Approved or completed successfully</rspCodeMsg><authRsp><gwyTranId>43170371</gwyTranId>  
</authRsp><tranData><swchKey>7777777732-000017-1-  
0000</swchKey><tranNr>000001337471</tranNr><dtTm>2013-07-19T10:12:02.000-  
07:00</dtTm><amt>000000001205</amt><stan>000168</stan></tranData><achResponse><Message>Transaction processed.</Message><Note>PrevPay: nil +0</Note><Note>Score: 100/100</Note><SendTranResponse>
```

The examples below show the format of the detail record request and response for a add customer, wallet and recurring profile.

Request

Add Credit Card Customer, Wallet Recurring Profiles:

```
1:<?xml version="1.0" encoding="UTF-8"?><UpdtRecurrProfRequest  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/"><merc><id>7777777731</id><inType>2</inType><prodType>5</prodType></merc><cust><type>0</type><contact><fullName>Antonio and Maria Garay</fullName><phone><type>0</type><nr>5203842564</nr></phone><addrLn1>3646 N Wadsworth Rd</addrLn1><state>AZ</state><zipCode>85643</zipCode><email>yitas.garay@gmail.com</email><type>1</type><stat>1</stat></contact><pmt><type>0</type><card><pan>4111*****1111</pan><xprDt>1712</xprDt></card><ordNr>12717ord</ordNr><desc>12717desc</desc><status>1</status></pmt></cust><recurProf><type>0</type><recur><recurProfStat>1</recurProfStat><dbtOrCdt>1</dbtOrCdt><amt>002613</amt><startDt>2017-06-05T00:00:00.000-00:00</startDt><bIlgCyc>30</bIlgCyc><desc>12717-2</desc><indCode>0</indCode><ordNr>odr</ordNr></recur></recurProf></UpdtRecurrProfRequest>
```

Response

Customer, Wallet and Recurring Profile Response:

```
1:<?xml version="1.0" encoding="UTF-8"?><UpdtRecurrProfResponse  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/"><id>1370449794477102042</id><custId>1370449794428199868</custId><pmtId>1370449794454146129</pmtId><rspCode>00</rspCode></UpdtRecurrProfResponse>
```

The examples below show the format of the detail record request and response for a wallet sale.

Request

Credit Card Wallet Sale:

```
1:<?xml version="1.0" encoding="UTF-8"?><SendTranRequest  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/"><merc><id>7777777731</id><inType>2</inType><prodType>5</prodType></merc><tranCode>14</tranCode><reqAmt>101</reqAmt><usrDef><name>Miscellan
```



```
eousField1</name><val>invoicenum</val></usrDef><<authReq><ordNr>CustomerRefID</ordNr></authReq><indCode>0</indCode><recurMan><id>1351698417122199837</id></recurMan></SendTranRequest>
```

ACH Wallet Debit Sale:

```
2:<?xml version="1.0" encoding="UTF-8"?><SendTranRequest  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/"><merc><id>7777777731</id><inType>2</inType><prodType>5</prodType></merc><tranCode>14</tranCode><reqAmt>100</reqAmt><indCode>0</indCode><recurMan><id>1349360945756112803</id></recurMan></SendTranRequest>
```

DO NOT COPY



Response

Credit Card Declined Response:

```
1:<?xml version="1.0" encoding="UTF-8"?><SendTranResponse  
xmlns="http://postilion/realtme/merchantframework/xsd/v1/"> <rspCode>54</rspCode><rspCodeMsg>Expired  
card</rspCodeMsg><authRsp/><tranData>  
  
<swchKey>7777777731-000071-1-7743</swchKey><tranNr>000001027441</tranNr>  
  
<dtTm>2013-03-05T13:35:56.000-08:00</dtTm><amt>000000000101</amt><stan>008876</stan>  
  
</tranData></SendTranResponse>
```

ACH Approved Response:

```
2:<?xml version="1.0" encoding="UTF-8"?><SendTranResponse  
xmlns="http://postilion/realtme/merchantframework/xsd/v1/"><rspCode>00</rspCode><rspCodeMsg>Approved  
or completed successfully</rspCodeMsg><authRsp><gwyTranId>43168657</gwyTranId>  
  
</authRsp><tranData><swchKey>7777777731-000071-2-  
0000</swchKey><tranNr>000001027451</tranNr><dtTm>2013-03-05T13:35:56.000-  
08:00</dtTm><amt>000000000100</amt><stan>008877</stan></tranData><Message>Transaction  
processed.</Message><Note>PrevPay: nil+0</Note>  
  
<Note>Score:100/100</Note></SendTranResponse>
```

The example below shows the request and response format of an empty batch file.

Request:

```
0777777731      20150224050000000031000  
00000000+0000000000000000
```

Response:

```
1777777731      20150224050000000031000  
00000000+0000000000000000  
0777777731      20150224050000000031000  
00000000+0000000000000000
```



7.2 Batch Detail Records

The batch records in the body of the batch file are in an XML format containing two main elements:

SendTranRequest – An XML element representing a transaction request.

SendTranResponse – An XML element representing a transaction response.

DO NOT COPY



7.3 Batch Header

The first line of the file contains a header record. Fields are of fixed length and are appended together without separation.

Element	Type	Description
Record Type	n..1	This field indicates the type of request. Valid Values: <ul style="list-style-type: none">• 0 = Request• 1 = Response
Merchant ID	an..15	Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• - Note: A special character cannot be the first character in this field.
DateTime Created	YYYYMMDDHHmmss..14	This identifies the date time the batch file is submitted for processing.
Batch File ID	n..6	Unique Batch ID – This is required to start with 000001 and increment with every new batch file submitted.
Batch Status	n..3	This identifies the status of the batch file. On initial request, 000 is required. When 000 is returned in the response, this indicates the file processed successfully.

Example Header:

07777777XX 20130820134515000001000



7.4 Batch Trailer

The last line of the file contains a trailer record. Fields are fixed length and appended together without separation.

Element	Type	Description
Record Count	n..8	Total transaction count in the batch file.
Net Amount Sign	an..1	Valid Values: <ul style="list-style-type: none">• +• -
Net Amount	n..12	This is the absolute value of the total authorized transaction amount in the batch file.

Example Trailer for batch of Auth/Settle transactions:

0000003+000000000003

Example Trailer for batch of Customer/Wallet or Recurring Profiles:

0000003+000000000000

The following sub-elements belong to SendTranResponse (a name inside the format column indicates a deeper sub-element defined and described in the XSD):

Element	Type	Description	M/C/O
recordID	an..15	A unique, incrementing ID for this record. Identical to the matching request's record ID.	M
rspCode	an..2	This is the code that describes the result of this transaction. Valid Values: <ul style="list-style-type: none">• Please refer to the Transaction Response Codes table.	M
authRsp	authRsp	This indicates the authorization information that can be used later for Settle Only transactions. See the XSD for more information. Conditions: <ul style="list-style-type: none">• This is mandatory for Auth Only transactions.	C
reqData	SendTranRequest	The XML data from the request that triggered this response.	M



7.5 Batch Detail Record

Each detail record(transaction request) is required to be separated by the newline character (\n), and, as such, no newline characters should be found anywhere in the detail record except to indicate the end of the record (transaction request).

Note: Each detail record is required to begin with a sequence number to identify the position of the record within the file. The first record is required to start with 1 and increment with each record in the file submitted.

Note: The samples below have linefeeds added for readability.

7.5.1 Sale (with mandatory and conditional fields)

This transaction is used to perform authorization and settlement or an ACH Debit in a single request, using mandatory and conditional fields.

Element	Type	Description	M/C
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 1 = Auth & Settle• 11 = ACH Debit	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe. Conditions: <ul style="list-style-type: none">• This element is mandatory when tranCode = 1.	C
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card. Conditions: <ul style="list-style-type: none">• This element is mandatory when tranCode = 1.	C
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M



achEcheck.bankRtNr	n9	This is the routing number of the customer's bank. Conditions: <ul style="list-style-type: none">This element is mandatory when tranCode = 11.	C
achEcheck.acctNr	n..17	This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits. Conditions: <ul style="list-style-type: none">This element is mandatory when tranCode = 11.	C
achEcheck.acctType	n1	Valid Values: <ul style="list-style-type: none">0 = Checking1 = Savings Conditions: <ul style="list-style-type: none">This element is only used when tranCode = 11. Note: This element defaults to 0 = Checking.	C
achEcheck.seccCode	A3	This identifies the authorization type for the ACH transaction. Valid Values: <ul style="list-style-type: none">0 = Telephone (TEL)1 = Internet (WEB)2 = Business to Consumer (PPD)3 = Business to Business (CCD) Conditions: <ul style="list-style-type: none">This element is mandatory when tranCode = 11.	C

Example Batch File with 2 Sale Requests:

```

07311      20180526104200000001000
1: <?xml version="1.0" encoding="UTF-8"?><SendTranRequest
xmlns="http://postilion/realtime/merchantframework/xsd/v1/"><merc><id>7311</id><inType>2</inType></merc><tranC
ode>1</tranCode><card><pan>411111*****1111</pan><xprDt>1806</xprDt><card><reqAmt>01000</reqAmt></SendT
ranRequest>
2: <?xml version="1.0" encoding="UTF-8"?><SendTranRequest
xmlns="http://postilion/realtime/merchantframework/xsd/v1/"><merc><id>7311</id><inType>2</inType></merc><tranC
ode>1</tranCode><card><pan>411111*****1111</pan><xprDt>1809</xprDt><card><reqAmt>0130</reqAmt></SendT
ranRequest>
00000002+000000000200

```

Example Request broken out and with line feeds:**Batch Header:**

07311 20180526104200000001000

Detail Records:



```
1: <?xml version="1.0" encoding="UTF-8"?><SendTranRequest  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/">  
<merc>  
<id>7311</id>  
<inType>2</inType>  
</merc>  
<tranCode>1</tranCode>  
<card>  
<pan>411111*****1111</pan>  
<xprDt>1806</xprDt>  
</card>  
<reqAmt>01000</reqAmt>  
</SendTranRequest>
```

```
2: <?xml version="1.0" encoding="UTF-8"?><SendTranRequest  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/">  
<merc>  
<id>7311</id>  
<inType>2</inType>  
</merc>  
<tranCode>1</tranCode>  
<card>  
<pan>411111*****1111</pan>  
<xprDt>1809</xprDt>  
</card>  
<reqAmt>0130</reqAmt>  
</SendTranRequest>
```

Batch Trailer:

00000002+000000000200

Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>  
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">  
<rspCode>00</rspCode>  
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>  
<authRsp>  
<secRslt>M</secRslt>  
<avsRslt>N</avsRslt>  
<aci>Y</aci>*  
<gwyTranId>123456789012345</gwyTranId>*  
<valCode>00 </valCode>  
</authRsp>  
<tranData>  
<swchKey>7731-000051-2-1201</swchKey>
```



```
<tranNr>000011275071</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000001000</amt>
<stan>003544</stan>
<auth>DSC265</auth>
</tranData>
<cardType>3</cardType>
<mapCaid>55552622240000</mapCaid>
</SendTranResponse>
```

Example Error Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>12</rspCode>
<rspCodeMsg>Invalid transaction</rspCodeMsg>
<extRspCode>B40J</extRspCode>
<extRspCodeMsg>Invalid merchant id linked transaction</extRspCodeMsg>
<authRsp/>
<tranData>
<swchKey>7731-000051-9-0000</swchKey>
<tranNr>000000001341</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000000</amt>
<stan>003547</stan>
</tranData>
</SendTranResponse>
```



7.5.2 Sale (with conditional and optional fields)

This transaction is used to perform authorization and settlement or ACH debit in a single request, using conditional and optional fields.

NOTE: Fields with an * are to be utilized for Card Holder Authentication purposes.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	<p>This is the input type from which the call is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 2 = Batch 	M
merc.prodType	n1	<p>This is the product type for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 4 = ACH • 5 = Credit/Debit Card (Default) <p>Conditions:</p> <ul style="list-style-type: none"> • merc.prodType must be consistent with tranCode 	O
tranCode	n..2	<p>Transaction Code: This indicates the type of transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 1 = Auth & Settle • 11 = ACH Debit 	M
card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • This element is mandatory when tranCode = 1. 	C
card.sec	n..4	<p>CVV2/CVC2/CID: This is the 3- or 4-digit card verification code located on the card.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • This element is only used when tranCode = 1. 	C
card.xprDt	n4, YYMM	<p>Expiration Date: This is the expiration date of the card.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • This element is mandatory when tranCode = 1. 	C
card.dbtOrCdt	n1	<p>This indicates whether the card is a debit or credit card.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 1 = Credit <p>Conditions:</p> <ul style="list-style-type: none"> • This element is only used when tranCode = 1. 	O



contact.fullName	ans..61	<p>This is the customer's full name.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
contact.coName	ans..30	This is the customer's company name.	O
contact.title	as..10	<p>This is the customer's title.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field.</p>	O
contact.phone.type	n1	<p>This is the type of customer phone number.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C
contact.phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• - <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	O
contact.addrLn1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements.	C



contact.addrLn2	ans..50	This is the customer's street address line 2.	O
contact.city	ans..40	This is the customer's city.	O
contact.state	a2	This is the customer's state. Values must be in all CAPS.	O
contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
contact.ctry	a2	This is the customer's country. The only permitted value is US.	O
contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
contact.ship.fullName	ans..61	This is the customer's full name for shipping purposes.	O
contact.ship.addrLn1	ans..50	This is the shipping street address line 1.	O
contact.ship.addrLn2	ans..50	This is the shipping street address line 2.	O
contact.ship.city	ans..40	This is the shipping city.	O
contact.ship.state	a2	This is the shipping state. Values must be in all CAPS.	O
contact.ship.zipCode	ans..9	<p>This is the shipping ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O
contact.ship.phone	ans..12	<p>This is the shipping phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	O



contact.ship.email	ans..75	<p>This is the shipping email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> • . • _ • % • + • - • @ <p>Note: A special character cannot be the first character in this field.</p>	O
reqAmt	n..8	<p>This contains the amount associated with this transaction in minor denominations.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • No special characters are allowed. • A leading zero is required. 	M
usrDef.name	ans..50	<p>This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call. Note: There are a total of 5 user defined fields that can be used per gateway id.</p> <p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef.val	ans..4000	<p>This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.</p>	O
pos.pmtDesc	ans..25	<p>Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased</p> <p>If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead</p>	O
indCode	n1	<p>This is the Industry Code that overrides the Merchant Profile information for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 0 = Direct marketing 	C
tranFlags.dupChkTmPrd	n..7	<p>This indicates the window of time in seconds after a transaction is submitted during which you can override the duplicate settings set in the TXP account.</p>	O



tranFlags.convFeeAcptd	a1	<p>RESERVED FOR FUTURE USE</p> <p>This indicates whether or not a convenience fee was presented and accepted by the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • Y = Yes • N = No <p>Conditions:</p> <ul style="list-style-type: none"> • When the merchant account is configured for a convenience fee, the convenience fee flag must be set to Y for all transactions. • If the merchant is not configured for convenience fee support, then this field is ignored. • If this is set to N, then no convenience fee was applied. • If this is set to Y, then a convenience fee was applied. 	O
authReq.xid(*)	20-byte (160 bit) binary number	<p>Unique tracking number generated by the merchant server to identify the transaction and prevent resubmission/replay. This is in binary format.</p> <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	O
authReq.cavv(*)	an..40	<p>Cryptographic value that proves Visa cardholder was authenticated. This is in hexadecimal format</p> <p>Conditions:</p> <ul style="list-style-type: none"> • Required for Visa transactions if cadlIndicator = 2 • If set when cadlIndicator = 0 or 1, transaction will be rejected • Only applies for Visa transactions • Optional if indCode=2 ECOM. Only eCommerce transactions may contain Cardholder Authentication data elements. 	C
authReq.ucafldcr(*)	n1	<p>Cardholder Authentication Data Collection (CADC) indicator.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 0 = CADC is not supported at the merchant's web site • 1 = CADC is supported by the merchant, but CAVV/UCAF data was not populated • 2 = CADC is supported by the merchant, and CAVV/UCAF data was populated <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C



authReq.ucaf(*)	an..64	<p>Cryptographic value that proves MasterCard cardholder was authenticated. This is in hexadecimal format.</p> <p>Conditions:</p> <ul style="list-style-type: none">Required for MasterCard transactions if cadlIndicator = 2If set when cadlIndicator = 0 or 1, transaction will be rejectedOnly applies for MasterCard transactions <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C
authReq.purcCard.mercOrdNr	ans..17	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">SP <p>Conditions:</p> <ul style="list-style-type: none">This is required for purchase card transactions.This is only applicable when tranCode = 1. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction and passing tax amount includes tax indicator.</p>	C
authReq.purcCard.billShip.type	n1	<p>This is the ShipToZipCode type.</p> <p>Valid values:</p> <ul style="list-style-type: none">3 = Ship to <p>Conditions:</p> <ul style="list-style-type: none">This element is only applicable to AMEX transactions <p>Note: A default type of 3 is set if the type is not provided.</p>	C
authReq.purcCard.billShip.contact.zipCode	ans..9	<p>This the ship to zip code.</p> <p>Conditions:</p> <ul style="list-style-type: none">This element is applicable/required for AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C



authReq.ordNr	ans..50	<p>This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions.</p> <p>Condition:</p> <ul style="list-style-type: none">If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p>	C
achEcheck.achAcctInfo	ans..10	<p>This is the description to use on all ACH transactions.</p> <p>Valid special characters:</p> <ul style="list-style-type: none">SP <p>Note: A special character cannot be the first character in this field.</p>	O
achEcheck.bankRtNr	n9	<p>This is the routing number of the customer's bank.</p> <p>Conditions:</p> <ul style="list-style-type: none">This element is mandatory when tranCode = 11.	C
achEcheck.acctNr	n..17	<p>This is the customer's checking/savings account number.</p> <p>Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p> <p>Conditions:</p> <ul style="list-style-type: none">This element is mandatory when tranCode = 11.	C
achEcheck.acctType	n1	<p>Valid Values:</p> <ul style="list-style-type: none">0 = Checking1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">This element is only used when tranCode = 11. <p>Note: This element defaults to 0 = Checking.</p>	O
achEcheck.seccCode	A3	<p>This identifies the authorization type for the ACH transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">0 = Telephone (TEL)1 = Internet (WEB)2 = Business to Consumer (PPD)3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none">This element is conditional when tranCode = 11.	C



tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 0 = Nontaxable • 1 = Taxable • 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none"> • This is required for purchase card transactions. <p>Note:</p> <ul style="list-style-type: none"> • Do not send this field unless you are processing a corporate/purchase card transaction. • Do Not Pass the Tax amount field when using values 0 and 2. 	C
tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • No special characters are allowed. • A leading zero is required. • This is required for purchase card transactions. • This is only applicable when tranCode = 1. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction.</p>	C

Example Request:

Batch Header:

```

07311          20110526104200000001000
1: <?xml version="1.0" encoding="UTF-8"?><SendTranRequest
  xmlns="http://postillion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
<prodType>5</prodType>
</merc>
<tranCode>1</tranCode>
<card>
<type>0</type>
<pan>3714*****2376</pan>
<sec>9998</sec>
<xprDt>1712</xprDt>
<sqncNr>111</sqncNr>
<dbtOrCdt>1</dbtOrCdt>
</card>
<contact>
```



```
<fullName>hjhjhj</fullName>
<coName>asdadsad</coName>
<title>sdasd</title>
<phone>
<type>0</type>
<nr>5555555555</nr>
</phone>
<city>Mobile</city>
<state>AL</state>
<ctry>US</ctry>
<email>exe@qw.com</email>
<ship>
<fullName>test</fullName>
<addrLn1>fghgfh</addrLn1>
<addrLn2>gfhfgh</addrLn2>
<city>fggfh</city>
<state>AL</state>
<zipCode>12345</zipCode>
<phone>5555555555</phone>
<email>exe@qw.com</email>
</ship>
</contact>
<reqAmt>0100</reqAmt>
<usrDef>
<name>Miscellaneous Field 1</name>
<val>Test13</val>
</usrDef>
<pos>
<pmtDesc>SOFTDescriptor</pmtDesc>
</pos>
<indCode>0</indCode>
<tranFlags>
<dupChkTmPrd>20</dupChkTmPrd>
</tranFlags>
<authReq>
<xid>46616b652058494420666f722074657374696e67</xid>
<cavv>54657374205669736120434156562076616c7565</cavv>
<ucafldcr>2</ucafldcr>
<ordNr>Invoice @</ordNr>
</authReq>
<tax>
<idcr>1</idcr>
<amt>0001</amt>
</tax>
<deviceType>00</deviceType>
<goodsSoldCode>1000</goodsSoldCode>
```



```
</SendTranRequest>
```

```
2: <?xml version="1.0" encoding="UTF-8"?><SendTranRequest  
xmlns="http://postilion/realtme/merchantframework/xsd/v1/">  
<merc>  
<id>7311</id>  
<inType>2</inType>  
<prodType>5</prodType>  
</merc>  
<tranCode>1</tranCode>  
<card>  
<type>0</type>  
<pan>549974*****0057</pan>  
<sec>998</sec>  
<xprDt>1712</xprDt>  
<sqncNr>111</sqncNr>  
<dbtOrCdt>1</dbtOrCdt>  
</card>  
<contact>  
<fullName>hjhjhj</fullName>  
<coName>asdadsad</coName>  
<title>sadasd</title>  
<phone>  
<type>0</type>  
<nr>5555555555</nr>  
</phone>  
<city>ap</city>  
<state>AL</state>  
<ctry>US</ctry>  
<email>exe@qw.com</email>  
<ship>  
<fullName>test</fullName>  
<addrLn1>fghgfh</addrLn1>  
<addrLn2>gfhfgh</addrLn2>  
<city>fggfh</city>  
<state>AL</state>  
<zipCode>12345</zipCode>  
<phone>5555555555</phone>  
<email>exe@qw.com</email>  
</ship>  
</contact>  
<reqAmt>0100</reqAmt>  
<usrDef>  
<name>Miscellaneous Field 1</name>  
<val>Test13</val>  
</usrDef>
```



```
<pos>
<pmtDesc>SOFTDescriptor</pmtDesc>
</pos>
<indCode>0</indCode>
<tranFlags>
<dupChkTmPrd>20</dupChkTmPrd>
</tranFlags>
<authReq>
<xid>46616b652058494420666f722074657374696e67</xid>
<cavv>54657374205669736120434156562076616c7565</cavv>
<ucafldcr>2</ucafldcr>
<ucaf>31323334353637383930</ucaf>
<ordNr>Invoice @</ordNr>
</authReq>
<tax>
<idcr>1</idcr>
<amt>0001</amt>
</tax>
<deviceType>00</deviceType>
</SendTranRequest>
```

Batch Trailer:

00000002+000000000200

DONOTCOPY

***Example Response:***

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp>
<secRslt>M</secRslt>
<avsRslt>N</avsRslt>
<aci>Y</aci>*
<gwyTranId>123456789012345</gwyTranId>*
<valCode>00 </valCode>
</authRsp>
<tranData>
<swchKey>777777731-000051-2-1201</swchKey>
<tranNr>000011275071</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000001000</amt>
<stan>003544</stan>
<auth>DSC265</auth>
</tranData>
<cardType>3</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```

Example Error Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>12</rspCode>
<rspCodeMsg>Invalid transaction</rspCodeMsg>
<extRspCode>B40J</extRspCode>
<extRspCodeMsg>Invalid merchant id linked transaction</extRspCodeMsg>
<authRsp/>
<tranData>
<swchKey>777777731-000051-9-0000</swchKey>
<tranNr>000000001341</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000000</amt>
<stan>003547</stan>
</tranData>
</SendTranResponse>
```



7.5.3 Auth Only (with mandatory fields)

This transaction is used to perform an authorization only, using mandatory fields. The transaction does not automatically settle. To include this transaction for settlement, an additional Settle Only request must be submitted.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 0 = Auth Only	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.	M
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M

Example Request:

Batch Header:

```
07311          20110526104200000001000
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>0</tranCode>
<card>
<pan>411111*****1111</pan>
<xprDt>1712</xprDt>
</card>
<reqAmt>010</reqAmt>
</SendTranRequest>
```



```
2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>0</tranCode>
<card>
<pan>411111*****1111</pan>
<xprDt>1712</xprDt>
</card>
<reqAmt>010</reqAmt>
</SendTranRequest>
```

```
3: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>0</tranCode>
<card>
<pan>411111*****1111</pan>
<xprDt>1712</xprDt>
</card>
<reqAmt>010</reqAmt>
</SendTranRequest>
```

Batch Trailer:

00000002+000000000200



Example Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp>
<secRslt>M</secRslt>
<avsRslt>N</avsRslt>
<aci>Y</aci>*
<gwyTranId>123456789012345</gwyTranId>*
<valCode>00 </valCode>
</authRsp>
<tranData>
<swchKey>777777731-000051-2-1201</swchKey>
<tranNr>000011275071</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>00000001000</amt>
<stan>003544</stan>
<auth>DSC265</auth>
</tranData>
<cardType>3</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```

Example Error Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>12</rspCode>
<rspCodeMsg>Invalid transaction</rspCodeMsg>
<extRspCode>B40J</extRspCode>
<extRspCodeMsg>Invalid merchant id linked transaction</extRspCodeMsg>
<authRsp/>
<tranData>
<swchKey>777777731-000051-9-0000</swchKey>
<tranNr>000000001341</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000000</amt>
<stan>003547</stan>
</tranData>
</SendTranResponse>
```



7.5.4 Auth Only (with conditional and optional fields)

This transaction is used to perform an authorization only, using conditional and optional fields. The transaction does not automatically settle. To include this transaction for settlement, an additional Settle Only request must be submitted.

NOTE: Fields with an * are to be utilized for Card Holder Authentication purposes.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
merc.prodType	n1	This is the product type for this particular transaction. Valid Values: <ul style="list-style-type: none">• 5 = Credit/Debit Card (Default)	O
merc.tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 0 = Auth Only	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.	M
card.sec	n..4	CVV2/CVC2/CID: This is the 3- or 4-digit card verification code located on the card.	C
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M
card.dbtOrCdt	n1	This indicates whether the card is a debit or credit card. Valid Values: <ul style="list-style-type: none">• 1 = Credit	O
contact.coName	ans..30	This is the customer's company name.	O
contact.title	as..10	This is the customer's title. Valid Special Characters: <ul style="list-style-type: none">• SP Note: A special character cannot be the first character in this field	O



contact.fullName	ans..61	<p>This is the customer's full name.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
contact.phone.type	n1	<p>This is the type of customer phone number.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C
contact.phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• - <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	O
contact.addrLn1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
contact.addrLn2	ans..50	This is the customer's street address line 2.	O
contact.city	ans..40	This is the customer's city.	O
contact.state	a2	This is the customer's state. Values must be in all CAPS.	O



contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
contact.ctry	a2	This is the customer's country. The only permitted value is US.	O
contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
contact.ship.fullName	ans..61	This is the shipping full name.	O
contact.ship.addrLn1	ans..50	This is the shipping street address line 1.	O
contact.ship.addrLn2	ans..50	This is the shipping street address line 2.	O
contact.ship.city	ans..40	This is the shipping city.	O
contact.ship.state	a2	This is the shipping state. Values must be in all CAPS.	O
contact.ship.zipCode	ans..9	<p>This is the shipping ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O
contact.ship.phone	ans..12	<p>This is the shipping phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	O



contact.ship.email	ans..75	<p>This is the shipping email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
reqAmt	n..8	<p>This contains the amount associated with this transaction in minor denominations.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef.name	ans..50	<p>This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call.</p> <p>Note: There are a total of 5 user defined fields that can be used per gateway id.</p> <p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef.val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
pos.pmtDesc	ans..25	Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead	O
indCode	n1	<p>This is the Industry Code that overrides the Merchant Profile information for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct marketing	C
tranFlags.dupChkTmPrd	n..7	This indicates the window of time in seconds after a transaction is submitted during which you can override the duplicate settings set in the TXP account.	O



tranFlags.convFeeAcptd	a1	<p>RESERVED FOR FUTURE USE</p> <p>This indicates whether or not a convenience fee was presented and accepted by the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• Y = Yes• N = No <p>Conditions:</p> <ul style="list-style-type: none">• When the merchant account is configured for a convenience fee, the convenience fee flag must be set to Y for all transactions.• If the merchant is not configured for convenience fee support, then this field is ignored.• If this is set to N, then no convenience fee was applied.• If this is set to Y, then a convenience fee was applied.	O
authReq.xid(*)	20-byte (160 bit) binary number	<p>Unique tracking number generated by the merchant server to identify the transaction and prevent resubmission/replay. This is in binary format.</p> <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	O
authReq.cavv(*)	an..40	<p>Cryptographic value that proves Visa cardholder was authenticated. This is in hexadecimal format</p> <p>Conditions:</p> <ul style="list-style-type: none">• Required for Visa transactions if cadlIndicator = 2• If set when cadlIndicator = 0 or 1, transaction will be rejected• Only applies for Visa transactions• Optional if indCode=2 ECOM. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ucafldcr(*)	n1	<p>Cardholder Authentication Data Collection (CADC) indicator.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = CADC is not supported at the merchant's web site• 1 = CADC is supported by the merchant, but CAVV/UCAF data was not populated• 2 = CADC is supported by the merchant, and CAVV/UCAF data was populated <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C



authReq.ucaf(*)	an..64	<p>Cryptographic value that proves MasterCard cardholder was authenticated. This is in hexadecimal format.</p> <p>Conditions:</p> <ul style="list-style-type: none">Required for MasterCard transactions if cadlIndicator = 2If set when cadlIndicator = 0 or 1, transaction will be rejectedOnly applies for MasterCard transactions <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C
authReq.purcCard.mercOrdNr	ans..17	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">SP <p>Conditions:</p> <ul style="list-style-type: none">This is required for purchase card transactions. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction and passing tax amount includes tax indicator.</p>	C
authReq.purcCard.billShip.type	n1	<p>This is the ShipToZipCode type.</p> <p>Valid values:</p> <ul style="list-style-type: none">3 = Ship to <p>Conditions:</p> <ul style="list-style-type: none">This element is only applicable to AMEX transactions <p>Note: A default type of 3 is set if the type is not provided.</p>	C
authReq.purcCard.billShip.contact.zipCode	ans..9	<p>This the ship to zip code.</p> <p>Conditions:</p> <ul style="list-style-type: none">This element is applicable/required for AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C



authReq.ordNr	ans..59	<p>This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions.</p> <p>Condition:</p> <ul style="list-style-type: none"> If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p>	C
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> 0 = Nontaxable 1 = Taxable 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none"> This is required for purchase card transactions. <p>Note:</p> <ul style="list-style-type: none"> Do not send this field unless you are processing a corporate/purchase card transaction. Do Not Pass the Tax amount field when using values 0 and 2. 	M
tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none"> No special characters are allowed. A leading zero is required. This is required for purchase card transactions. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction.</p>	C

Example Request:

Batch Header:

```
07311          2011052610420000001000
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
```



```
<inType>2</inType>
<prodType>5</prodType>
</merc>
<tranCode>0</tranCode>
<card>
<type>0</type>
<pan>411111*****1111</pan>
<sec>999</sec>
<xprDt>1712</xprDt>
<sqncNr>111</sqncNr>
<dbtOrCdt>1</dbtOrCdt>
</card>
<contact>
<fullName>hjhjhj</fullName>
<coName>asdadsad</coName>
<title>sdasd</title>
<phone>
<type>0</type>
<nr>5555555555</nr>
</phone>
<city>ap</city>
<state>AL</state>
<ctry>US</ctry>
<email>exe@qw.com</email>
<ship>
<fullName>test</fullName>
<addrLn1>fghgfh</addrLn1>
<addrLn2>gfhfgh</addrLn2>
<city>fggfh</city>
<state>AL</state>
<zipCode>12345</zipCode>
<phone>5555555555</phone>
<email>exe@qw.com</email>
</ship>
</contact>
<reqAmt>0100</reqAmt>
<usrDef>
<name>Miscellaneous Field 1</name>
<val>Test13</val>
</usrDef>
<pos>
<pmtDesc>SOFTDescriptor</pmtDesc>
</pos>
<indCode>0</indCode>
<tranFlags>
<dupChkTmPrd>20</dupChkTmPrd>
```



```
</tranFlags>
<authReq>
<xid>46616b652058494420666f722074657374696e67</xid>
<cavv>54657374205669736120434156562076616c7565</cavv>
<ucafIdcr>2</ucafIdcr>
<ordNr>Invoice @</ordNr>
</authReq>
<tax>
<idcr>1</idcr>
<amt>0001</amt>
</tax>
<deviceType>00</deviceType>
</SendTranRequest>
```

```
2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
<prodType>5</prodType>
</merc>
<tranCode>0</tranCode>
<card>
<type>0</type>
<pan>371*****2376</pan>
<sec>9998</sec>
<xprDt>1712</xprDt>
<sqncNr>111</sqncNr>
<dbtOrCdt>1</dbtOrCdt>
</card>
<contact>
<fullName>hjhjhj</fullName>
<coName>asdadsad</coName>
<title>sadasd</title>
<phone>
<type>0</type>
<nr>5555555555</nr>
</phone>
<city>ap</city>
<state>AL</state>
<ctry>US</ctry>
<email>exe@qw.com</email>
<ship>
<fullName>test</fullName>
<addrLn1>fghgfh</addrLn1>
<addrLn2>gfhfgh</addrLn2>
```



```
<city>fggfh</city>
<state>AL</state>
<zipCode>12345</zipCode>
<phone>5555555555</phone>
<email>exe@qw.com</email>
</ship>
</contact>
<reqAmt>010</reqAmt>
<usrDef>
<name>Miscellaneous Field 1</name>
<val>Test13</val>
</usrDef>
<lclDtTm>2011-04-08T00:00:00.000+05:00</lclDtTm>
<indCode>0</indCode>
<tranFlags>
<dupChkTmPrd>20</dupChkTmPrd>
<convFeeAcptd>N</convFeeAcptd>
</tranFlags>
<authReq>
<xid>46616b652058494420666f722074657374696e67</xid>
<cavv>54657374205669736120434156562076616c7565</cavv>
<ucafldcr>2</ucafldcr>
<ordNr>Invoice @</ordNr>
</authReq>
<tax>
<idcr>1</idcr>
<amt>0123456789012</amt>
</tax>
<deviceType>00</deviceType>
<goodsSoldCode>1000</goodsSoldCode>
</SendTranRequest>
```

Batch Trailer:

00000002+000000000200

***Example Response:***

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp>
<secRslt>M</secRslt>
<avsRslt>N</avsRslt>
<aci>Y</aci>*
<gwyTranId>123456789012345</gwyTranId>*
<valCode>00</valCode>
</authRsp>
<tranData>
<swchKey>7777777731-000051-2-1201</swchKey>
<tranNr>000011275071</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000001000</amt>
<stan>003544</stan>
<auth>DSC265</auth>
</tranData>
<cardType>3</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```

DO NOT COPY



7.5.5 Void (with mandatory fields)

This transaction is used to cancel a previous transaction not yet settled or marked for settlement, using mandatory fields. This transaction type prevents a transaction from being sent for settlement and completes an authorization reversal as part of its process.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 2 = Credit Card Auth Reversal• 16 = ACH Cancel	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

Example Request:

Batch Header:

```
07311      20110526104200000001000
1:<?xmlversion="1.0"encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>2</tranCode>
<origTranData>
<tranNr>000000188381</tranNr>
</origTranData>
</SendTranRequest>

2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>2</tranCode>
```



```
<origTranData>
<tranNr>000000188381</tranNr>
</origTranData>
</SendTranRequest>
```

DO NOT COPY



```
3: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>2</tranCode
<origTranData>
<tranNr>000000188381</tranNr>
</origTranData>
</SendTranRequest>
```

Batch Trailer:

00000002+00000000000000

Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>777777731-000051-8-0000</swchKey>
<tranNr>000011274971</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>00000000130</amt>
<stan>003546</stan>
<auth>TAS222</auth>
</tranData>
<cardType>0</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```



7.5.6 Force/Voice Authorization Only (with mandatory fields)

This transaction type is used to settle an authorization obtained from an external source, using mandatory fields. The authorization code is a mandatory field.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none"> • 2 = Batch 	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none"> • 3 = Settle Only 	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.	M
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none"> • No special characters are allowed. • A leading zero is required. • This is required when settling a transaction with an amount that is different from its original authorization. • This is required whenever settling transactions authorized externally to this platform (i.e., force/voice authorizations). • When tranCode = 3, this field should be greater than 0. 	M
origTranData.dtTm	dateTime	This contains the local date and time when the transaction takes place at the card acceptor location. Ex: YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time. TXP doesn't allow for the date/time to be set in the future.	M
origTranData.auth	anp..6	Authorization: This is the authorization code received from the external source.	M

Example Request:

Batch Header:

```
07311      20110526104200000001000
1:<?xmlversion="1.0"encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
```



```
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>3</tranCode>
<card>
<pan>411111*****1111</pan>
<xprDt>1712</xprDt>
</card>
<reqAmt>050</reqAmt>
<origTranData>
<dtTm>2011-04-14T00:00:00.000+05:00</dtTm>
<auth>TAS307</auth>
</origTranData>
</SendTranRequest>
```

```
2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>3</tranCode>
<card>
<pan>411111*****1111</pan>
<xprDt>1712</xprDt>
</card>
<reqAmt>050</reqAmt>
<origTranData>
<dtTm>2011-04-14T00:00:00.000+05:00</dtTm>
<auth>TAS307</auth>
</origTranData>
</SendTranRequest>
```

Batch Trailer:

00000002+0000000000200

Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>777777731-000051-3-2376</swchKey>
<tranNr>000011275041</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000130</amt>
```



```
<stan>003541</stan>
<auth>TA3019</auth>
</tranData>
<cardType>2</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```

DO NOT COPY



7.5.7 Force/Voice Authorization Only (with conditional and optional fields)

This transaction type is used to settle an authorization obtained from an external source, using conditional and optional fields. The authorization code is a mandatory field.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
merc.prodType	n1	This is the product type for this particular transaction. Valid Values: <ul style="list-style-type: none">• 5 = Credit/Debit Card (Default)	O
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 3 = Settle Only	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.	M
card.sec	n..4	CVV2/CVC2/CID: This is the 3- or 4-digit card verification code located on the card.	C
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M
card.dbtOrCdt	n1	This indicates whether the card is a debit or credit card. Valid Values: <ul style="list-style-type: none">• 1 = Credit	O
contact.fullName	ans..61	This is the customer's full name. Conditions: <ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
contact.coName	ans..30	This is the customer's company name.	O



contact.title	as..10	<p>This is the customer's title.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field</p>	O
contact.phone.type	n1	<p>This is the type of customer phone number.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C
contact.phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• - <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	O
contact.addrLn1	Ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS).• This is highly recommended for appropriate card not present qualification.	O
contact.addrLn2	Ans..50	This is the customer's street address line 2.	O
contact.city	ans..50	This is the customer's city.	O
contact.state	a2	This is the customer's state. Values must be in all CAPS.	O
contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS).• This is highly recommended for appropriate card not present qualification. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C



contact.ctry	a2	This is the customer's country. The only permitted value is US.	O
contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
contact.ship.fullName	ans..61	This is the shipping full name.	O
contact.ship.addrLn1	ans..50	This is the shipping street address line 1.	O
contact.ship.addrLn2	ans..50	This is the shipping street address line 2.	O
contact.ship.city	ans..40	This is the shipping city.	O
contact.ship.state	a2	This is the shipping state. Values must be in all CAPS.	O
contact.ship.zipCode	ans..9	<p>This is the shipping ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	O
contact.ship.phone	ans..12	<p>This is the shipping phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	O
contact.ship.email	ans..75	<p>This is the shipping email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O



reqAmt	n..8	<p>This contains the amount associated with this transaction in minor denominations.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required when settling a transaction with an amount that is different than its original authorization.• This is required whenever settling transactions authorized externally to this platform (i.e., force/voice authorizations).• When tranCode = 3, this field should be greater than 0.	M
usrDef. name	ans..50	<p>This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call.</p> <p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef. val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
pos.pmtDesc	ans..25	Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased. If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead	O
indCode	n1	<p>This is the Industry Code that overrides the Merchant Profile information for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct marketing	O
tranFlags.dupChkTmPrd	n..7	This indicates the window of time in seconds after a transaction is submitted during which you can override the duplicate settings set in the TXP account.	O



tranFlags.convFeeAcptd	a1	<p>RESERVED FOR FUTURE USE</p> <p>This indicates whether or not a convenience fee was presented and accepted by the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • Y = Yes • N = No <p>Conditions:</p> <ul style="list-style-type: none"> • When the merchant account is configured for a convenience fee, the convenience fee flag must be set to Y for all transactions. • If the merchant is not configured for convenience fee support, then this field is ignored. • If this is set to N, then no convenience fee was applied. • If this is set to Y, then a convenience fee was applied. 	O
authReq.purcCard.mercOrdNr	ans..17	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> • SP <p>Conditions:</p> <ul style="list-style-type: none"> • This is required for purchase card transactions. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction and passing tax amount includes tax indicator.</p>	C
authReq.purcCard.billShip.type	n1	<p>This is the ShipToZipCode type.</p> <p>Valid values:</p> <ul style="list-style-type: none"> • 3 = Ship to <p>Conditions:</p> <ul style="list-style-type: none"> • This element is only applicable to AMEX transactions <p>Note: A default type of 3 is set if the type is not provided.</p>	C
authReq.purcCard.billShip.contact.zipCode	ans..9	<p>This is the ship to zip code.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • This element is applicable/required for AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
authReq.ordNr	ans..50	<p>This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions.</p> <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p>	O



origTranData.dtTm	dateTime	This contains the local date and time when the transaction takes place at the card acceptor location. Ex: YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time. TXP doesn't allow for the date/time to be set in the future.	M
origTranData.auth	anp..6	Authorization: This is the authorization code received from the external source.	M
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Nontaxable• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions. <p>Note:</p> <ul style="list-style-type: none">• Do not send this field unless you are processing a corporate/purchase card transaction.• Do Not Pass the Tax amount field when using values 0 and 2.	C
tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction.</p>	C

Example Request:**Batch Header:**

```
07311      20110526104200000001000
1:<?xmlversion="1.0"encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
<prodType>5</prodType>
</merc>
<tranCode>3</tranCode>
<card>
<type>0</type>
```



```
<pan>411111*****1111</pan>
<sec>999</sec>
<xprDt>1712</xprDt>
<sqncNr>111</sqncNr>
<dbtOrCdt>1</dbtOrCdt>
</card>
<contact>
<fullName>dfgfdgfg</fullName>
<coName>fgdfgf</coName>
<title>dfsdf</title>
<phone>
<type>0</type>
<nr>5555555555</nr>
</phone>
<city>ap</city>
<state>AL</state>
<ctry>ae</ctry>
<email>exe@qw.com</email>
<ship>
<fullName>gfhfgh</fullName>
<addrLn1>ghfdghgf</addrLn1>
<addrLn2>hgfhgfh</addrLn2>
<city>gfhgfh</city>
<state>AL</state>
<zipCode>12345</zipCode>
<phone>5555555555</phone>
<email>wer@qw.com</email>
</ship>
</contact>
<reqAmt>0100</reqAmt>
<usrDef>
<name>Miscellaneous Field 1</name>
<val>Test13</val>
</usrDef>
<pos>
<pmtDesc>SOFTDescriptor</pmtDesc>
</pos>
<indCode>0</indCode>
<tranFlags>
<dupChkTmPrd>20</dupChkTmPrd>
</tranFlags>
<authReq>
<ordNr>Invoice @</ordNr>
</authReq>
<origTranData>
<dtTm>2011-04-14T00:00:00.000+05:00</dtTm>
```



```
<auth>TAS320</auth>
</origTranData>
<tax>
<idcr>1</idcr>
<amt>0001</amt>
</tax>
</SendTranRequest>
```

```
2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
<prodType>5</prodType>
</merc>
<tranCode>3</tranCode>
<card>
<type>0</type>
<pan>411111*****1111</pan>
<sec>999</sec>
<xprDt>1712</xprDt>
<sqncNr>111</sqncNr>
<dbtOrCdt>1</dbtOrCdt>
</card>
<contact>
<id>12345</id>
<fullName>dfgfdgfg</fullName>
<coName>fgdfgf</coName>
<title>dfsdf</title>
<phone>
<type>0</type>
<nr>5555555555</nr>
</phone>
<city>ap</city>
<state>AL</state>
<ctry>ae</ctry>
<email>exe@qw.com</email>
<ship>
<fullName>gfhfgh</fullName>
<addrLn1>ghfdghgf</addrLn1>
<addrLn2>hgfhgfh</addrLn2>
<city>gfhgfh</city>
<state>AL</state>
<zipCode>12345</zipCode>
<phone>5555555555</phone>
<email>wer@qw.com</email>
```



```
</ship>
</contact>
<reqAmt>0100</reqAmt>
<usrDef>
<name>Miscellaneous Field 1</name>
<val>Test13</val>
</usrDef>
<pos>
<pmtDesc>SOFTDescriptor</pmtDesc>
</pos>
<indCode>0</indCode>
<tranFlags>
<dupChkTmPrd>20</dupChkTmPrd>
</tranFlags>
<authReq>
<ordNr>Invoice @</ordNr>
</authReq>
<origTranData>
<dtTm>2011-04-14T00:00:00.000+05:00</dtTm>
<auth>TAS320</auth>
</origTranData>
<tax>
<idcr>1</idcr>
<amt>0001</amt>
</tax>
</SendTranRequest>
```

Batch Trailer:

00000002+0000000000200

Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postillion/realtime/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>7777777731-000051-3-2376</swchKey>
<tranNr>000011275041</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>00000000130</amt>
<stan>003541</stan>
<auth>TA3019</auth>
</tranData>
<cardType>2</cardType>
<mapCaid>555526222400000</mapCaid>
```



</SendTranResponse>

DO NOT COPY



7.5.8 Force/Voice Auth Void (with mandatory fields)

This transaction type is used to cancel a force/voice authorization transaction, using mandatory fields only. This transaction does not perform an authorization reversal.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 6 = Settle Void	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

Example Request:

Batch Header:

```
07311      20110526104200000001000
1:<?xmlversion="1.0"encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>6</tranCode>
<origTranData>
<tranNr>000000191701</tranNr>
</origTranData>
</SendTranRequest>
```

```
2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>6</tranCode>
<origTranData>
<tranNr>000000191701</tranNr>
</origTranData>
```



```
</SendTranRequest>
```

Batch Trailer:

```
00000002+0000000000000000
```

Example Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>7777777731-000051-3-2376</swchKey>
<tranNr>000011275041</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000130</amt>
<stan>003541</stan>
<auth>TA3019</auth>
</tranData>
<cardType>2</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```



7.5.9 Blind Credit (with mandatory and conditional fields)

This transaction type is used to issue a credit (refund) to a card or bank account that does not have a corresponding debit/sale transaction using mandatory and conditional fields only. Due to risks associated with this transaction type, merchants are required to obtain approval from TSYS prior to performing blind credit transactions.

Element	Type	Description	M/C
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 5 = Blind credit• 12 = ACH Blind credit	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of the card and is contained within the track data encoded on the magnetic stripe. Conditions: <ul style="list-style-type: none">• This element is mandatory when tranCode = 5.	C
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
achEcheck.bankRtNr	n9	This is the routing number of the customer's bank. Conditions: <ul style="list-style-type: none">• This element is mandatory when tranCode = 12.	C
achEcheck.acctNr	n..17	This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits. Conditions: <ul style="list-style-type: none">• This element is mandatory when tranCode = 12.	C



achEcheck.acctType	n1	<p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when tranCode = 12. <p>Note: This element defaults to 0 = Checking.</p>	O
achEcheck.seccCode	A3	<p>This identifies the authorization type for the ACH transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Telephone (TEL)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when tranCode = 12.	C

***Example Request:******Batch Header:***

```
07311      20110526104200000001000
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>5</tranCode>
<card>
<pan>411111*****1111</pan>
</card>
<reqAmt>0100</reqAmt>
</SendTranRequest>

2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>5</tranCode>
<card>
<pan>411111*****1111</pan>
</card>
<reqAmt>0100</reqAmt>
</SendTranRequest>

3: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>5</tranCode>
<card>
<pan>411111*****1111</pan>
</card>
<reqAmt>0100</reqAmt>
</SendTranRequest>
```

Batch Trailer:

00000002+000000000200



DO NOT COPY



Example Response:

```
1<?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>7777777731-000051-4-0057</swchKey>
<tranNr>000011275031</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000130</amt>
<stan>003540</stan>
</tranData>
<cardType>1</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```

DONOTCOPY



7.5.10 Blind Credit (with conditional and optional fields)

This transaction type is used to issue a credit (refund) to a card or bank account that does not have a corresponding debit/sale transaction using mandatory, conditional, and optional fields. Due to risks associated with this transaction type, merchants are required to obtain approval from TSYS prior to performing blind credit transactions.

NOTE: Fields with an * are to be utilized for Card Holder Authentication purposes.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
merc.prodType	n1	This is the product type for this particular transaction. Valid Values: <ul style="list-style-type: none">• 4 = ACH• 5 = Credit/Debit Card (Default) Conditions: <ul style="list-style-type: none">• merc.prodType must be consistent with tranCode	O
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 5 = Blind credit• 12 = ACH Blind credit	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe. Conditions: <ul style="list-style-type: none">• This element is mandatory when tranCode = 5.	C
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card. Conditions: <ul style="list-style-type: none">• This element is mandatory when tranCode = 5.	C
card.dbtOrCdt	n1	This indicates whether the card is a debit or credit card. Valid Values: <ul style="list-style-type: none">• 1 = Credit Conditions: <ul style="list-style-type: none">• This element is only used when tranCode = 5.	O



contact.fullName	ans..61	This is the customer's full name. Conditions: <ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
contact.coName	ans..30	This is the customer's company name.	O
contact.title	as..10	This is the customer's title. Valid Special Characters: <ul style="list-style-type: none">• SP Note: A special character cannot be the first character in this field	O
contact.phone.type	n1	This is the type of customer phone number. Valid Values: <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other Conditions: <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C
contact.phone.nr	ans..12	This is the customer's phone number. Phone number cannot be less than 10 or more than 12 characters. Valid special character: <ul style="list-style-type: none">• - Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.	O
contact.addrLn1	ans..50	This is the customer's street address line 1.	O
contact.addrLn2	ans..50	This is the customer's street address line 2.	O
contact.city	ans..40	This is the customer's city.	O
contact.state	a2	This is the customer's state. Values must be in all CAPS.	O
contact.zipCode	ans..9	This is the customer's ZIP code. Note: Hyphen is not allowed for a 9 digit value.	O



contact.ctry	a2	This is the customer's country. The only permitted value is US.	0
contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	0
contact.ship.fullName	ans..61	This is the shipping full name.	0
contact.ship.addrLn1	ans..50	This is the shipping street address line 1.	0
contact.ship.addrLn2	ans..50	This is the shipping street address line 2.	0
contact.ship.city	ans..40	This is the shipping city.	0
contact.ship.state	a2	This is the shipping state. Values must be in all CAPS.	0
contact.ship.zipCode	ans..9	<p>This is the shipping ZIP code.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	0
contact.ship.phone	ans..12	<p>This is the shipping phone number. Phone number cannot be less than 10 or more than 12 characters.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• -	0
contact.ship.email	ans..75	<p>This is the shipping email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• _• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	0



reqAmt	n..8	<p>This contains the amount associated with this transaction in minor denominations.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef.name	ans..50	<p>This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call. Note: There are a total of 5 user defined fields that can be used per gateway id.</p> <p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef. val	ans..4000	<p>This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.</p>	O
pos.pmtDesc	ans..25	<p>Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased</p> <p>If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead</p>	O
indCode	n1	<p>This is the Industry Code that overrides the Merchant Profile information for this particular transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct marketing <p>Conditions:</p> <ul style="list-style-type: none">• This is only applicable when tranCode = 5.	C
tranFlags.dupChkTmPrd	n..7	<p>This indicates the window of time in seconds after a transaction is submitted during which you can override the duplicate settings set in the TXP account.</p>	O



tranFlags.convFeeAcptd	a1	<p>RESERVED FOR FUTURE USE</p> <p>This indicates whether or not a convenience fee was presented and accepted by the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• Y = Yes• N = No <p>Conditions:</p> <ul style="list-style-type: none">• When the merchant account is configured for a convenience fee, the convenience fee flag must be set to Y for all transactions.• If the merchant is not configured for convenience fee support, then this field is ignored.• If this is set to N, then no convenience fee was applied.• If this is set to Y, then a convenience fee was applied.	O
authReq.xid(*)	20-byte (160 bit) binary number	<p>Unique tracking number generated by the merchant server to identify the transaction and prevent resubmission/replay. This is in binary format.</p> <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	O
authReq.cavv(*)	an..40	<p>Cryptographic value that proves Visa cardholder was authenticated. This is in hexadecimal format</p> <p>Conditions:</p> <ul style="list-style-type: none">• Required for Visa transactions if cadlIndicator = 2• If set when cadlIndicator = 0 or 1, transaction will be rejected• Only applies for Visa transactions• Optional if indCode=2 ECOM. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ucafldcr(*)	n1	<p>Cardholder Authentication Data Collection (CADC) indicator.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = CADC is not supported at the merchant's web site• 1 = CADC is supported by the merchant, but CAVV/UCAF data was not populated• 2 = CADC is supported by the merchant, and CAVV/UCAF data was populated <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C



authReq.ucaf(*)	an..64	<p>Cryptographic value that proves MasterCard cardholder was authenticated. This is in hexadecimal format.</p> <p>Conditions:</p> <ul style="list-style-type: none"> Required for MasterCard transactions if cadlIndicator = 2 If set when cadlIndicator = 0 or 1, transaction will be rejected Only applies for MasterCard transactions <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	C
authReq.purcCard.mercOrdNr	ans..17	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> SP <p>Conditions:</p> <ul style="list-style-type: none"> This is required for purchase card transactions. This is only applicable when tranCode = 5. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction and passing tax amount includes tax indicator.</p>	C
authReq.purcCard.billShip.type	n1	<p>This is the contact type.</p> <p>Valid values:</p> <ul style="list-style-type: none"> 3 = Ship to <p>Conditions:</p> <ul style="list-style-type: none"> This element is only applicable to AMEX transactions <p>Note: A default type of 3 is set if the type is not provided.</p>	C
authReq.purcCard.billShip.contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none"> This element is only applicable to AMEX transactions. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
authReq.ordNr	ans..50	<p>This is the customer reference ID (order number) assigned to this transaction.</p> <p>Condition:</p> <ul style="list-style-type: none"> If the transaction is going to include cardholder authentication information, this field is required. Only eCommerce transactions may contain Cardholder Authentication data elements. <p>Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.</p>	C



achEcheck.achAcctInfo	ans..10	<p>This is the description to use on all ACH transactions.</p> <p>Valid special characters:</p> <ul style="list-style-type: none">• SP <p>Note: A special character cannot be the first character in this field.</p>	O
achEcheck.bankRtNr	n9	<p>This is the routing number of the customer's bank.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when tranCode = 12.	C
achEcheck.acctNr	n..17	<p>This is the customer's checking/savings account number.</p> <p>Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when tranCode = 12.	C
achEcheck.acctType	n1	<p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when tranCode = 12. <p>Note: This element defaults to 0 = Checking.</p>	O
achEcheck.seccCode	A3	<p>This identifies the authorization type for the ACH transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Telephone (TEL)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when tranCode = 12.	C



tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Nontaxable• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions. <p>Note:</p> <ul style="list-style-type: none">• Do not send this field unless you are processing a corporate/purchase card transaction.• Do Not Pass the Tax amount field when using values 0 and 2.	C
tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions.• This is only applicable when tranCode = 5. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction.</p>	C

Example Request:**Batch Header:**

```
07311      20110526104200000001000
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
<prodType>5</prodType>
</merc>
<tranCode>5</tranCode>
<card>
<type>0</type>
<pan>411111*****1111</pan>
<sec>999</sec>
<xprDt>1712</xprDt>
<sqncNr>111</sqncNr>
<dbtOrCdt>1</dbtOrCdt>
</card>
<contact>
```



```
<fullName>dfgfdgfg</fullName>
<coName>fgdfgf</coName>
<title>dfsdf</title>
<phone>
<type>0</type>
<nr>5555555555</nr>
</phone>
<city>ap</city>
<state>AL</state>
<ctry>ae</ctry>
<email>exe@qw.com</email>
<ship>
<fullName>gfhfgh</fullName>
<addrLn1>ghfdghgf</addrLn1>
<addrLn2>hgfhgfh</addrLn2>
<city>gfhgfh</city>
<state>AL</state>
<zipCode>12345</zipCode>
<phone>5555555555</phone>
<email>wer@qw.com</email>
</ship>
</contact>
<reqAmt>0100</reqAmt>
<usrDef>
<name>Miscellaneous Field 1</name>
<val>Test13</val>
</usrDef>
<pos>
<pmtDesc>SOFTDescriptor</pmtDesc>
</pos>
<indCode>0</indCode>
<tranFlags>
<dupChkTmPrd>20</dupChkTmPrd>
</tranFlags>
<authReq>
<ordNr>Invoice @</ordNr>
</authReq>
<tax>
<idcr>1</idcr>
<amt>0001</amt>
</tax>
</SendTranRequest>
```

```
2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
```



```
<inType>2</inType>
<prodType>5</prodType>
</merc>
<tranCode>5</tranCode>
<card>
<type>0</type>
<pan>411111*****1111</pan>
<sec>999</sec>
<xprDt>1712</xprDt>
<sqncNr>111</sqncNr>
<dbtOrCdt>1</dbtOrCdt>
</card>
<contact>
<id>12345</id>
<fullName>dfgfdgfg</fullName>
<coName>fgdfgf</coName>
<title>dfsdf</title>
<phone>
<type>0</type>
<nr>5555555555</nr>
</phone>
<city>ap</city>
<state>AL</state>
<ctry>ae</ctry>
<email>exe@qw.com</email>
<ship>
<fullName>gfhfgh</fullName>
<addrLn1>ghfdghgf</addrLn1>
<addrLn2>hgfhgfh</addrLn2>
<city>gfhgfh</city>
<state>AL</state>
<zipCode>12345</zipCode>
<phone>5555555555</phone>
<email>wer@qw.com</email>
</ship>
</contact>
<reqAmt>0100</reqAmt>
<usrDef>
<name>Miscellaneous Field 1</name>
<val>Test13</val>
</usrDef>
<pos>
<pmtDesc>SOFTDescriptor</pmtDesc>
</pos>
<indCode>0</indCode>
<tranFlags>
```



```
<dupChkTmPrd>20</dupChkTmPrd>
</tranFlags>
<authReq>
<ordNr>Invoice @</ordNr>
</authReq>
</SendTranRequest>
```

Batch Trailer:

00000002+000000000200

Example Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>777777731-000051-4-0057</swchKey>
<tranNr>000011275031</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>00000000130</amt>
<stan>003540</stan>
</tranData>
<cardType>1</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```



7.5.11 Blind Credit Void (with mandatory fields)

This transaction type is used to issue a credit (refund) to a card that does not have a corresponding debit/sale transaction using mandatory fields only. Due to risks associated with this transaction type, merchants are required to obtain approval from TSYS prior to performing blind credit transactions.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 13 = Blind credit Void	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

Example Request:

Batch Header:

07311 20110526104200000001000

```
1:<?xmlversion="1.0"encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>13</tranCode>
<origTranData>
<tranNr>000000192521</tranNr>
</origTranData>
</SendTranRequest>
</soap:Body>
```

```
2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
```



```
<tranCode>13</tranCode>
<origTranData>
<tranNr>000000192521</tranNr>
</origTranData>
</SendTranRequest>
</soap:Body>
```

Batch Trailer:

00000002+000000000000

Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>7777777731-000051-10-0000</swchKey>
<tranNr>000011275001</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000131</amt>
<stan>003548</stan>
</tranData>
<cardType>0</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```



7.5.12 Credit /Return (with mandatory fields)

This transaction type is used to issue a credit (refund) to a card that has a corresponding debit/sale transaction that has already settled, using mandatory fields only.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 4 = Credit Card credit/return• 16 = ACH Full Refund	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. The amount cannot be greater than the original sale amount. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef.name	ans..50	This is a user-defined field. The field name must be updated using Virtual Terminal. Once the field name is updated, it can be passed as part of a web service call. Note: There are a total of 5 user defined fields that can be used per gateway id. This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O
usrDef. val	ans..400 0	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
authReq.ordNr	ans..50	This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions. Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.	O
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

Example Request:

Batch Header:



07311 20110526104200000001000

1: <?xml version="1.0" encoding="UTF-8"?>

<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">

<merc>

<id>7311</id>

<inType>2</inType>

</merc>

<tranCode>4</tranCode>

<contact>

<ship/>

</contact>

<reqAmt>010</reqAmt>

<usrDef>

<name>Miscellaneous Field 1</name>

<val>Test13</val>

</usrDef>

<authReq>

<ordNr>Invoice @</ordNr>

</authReq>

<origTranData>

<tranNr>182961</tranNr>

</origTranData>

</SendTranRequest>

</soap:Body>

2: <?xml version="1.0" encoding="UTF-8"?>

<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">

<merc>

<id>7311</id>

<inType>2</inType>

</merc>

<tranCode>4</tranCode>

<contact>

<ship/>

</contact>

<reqAmt>010</reqAmt>

<usrDef>

<name>Miscellaneous Field 1</name>

<val>Test13</val>

</usrDef>

<authReq>

<ordNr>Invoice @</ordNr>

</authReq>

<origTranData>

<tranNr>182961</tranNr>

</origTranData>



```
</SendTranRequest>  
</soap:Body>
```

Batch Trailer:

```
00000002+00000000000020
```

DO NOT COPY



Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>7777777731-000051-7-0000</swchKey>
<tranNr>000011275081</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000100</amt>
<stan>003545</stan>
</tranData>
<cardType>1</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```

DONOTCOPY



7.5.13 Credit/Return Void (with mandatory fields)

This transaction is used to cancel a Credit/Return transaction.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 13 = Credit/Return Void	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

Example Request:

Batch Header:

```
07311      20110526104200000001000
1:<?xmlversion="1.0"encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtimemerchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>13</tranCode>
<origTranData>
<tranNr>000000190941</tranNr>
</origTranData>
</SendTranRequest>

2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtimemerchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>13</tranCode>
<origTranData>
<tranNr>000000190941</tranNr>
</origTranData>
</SendTranRequest>
```



Batch Trailer:

00000002+000000000000

DONOTCOPY



Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>7777777731-000051-10-0000</swchKey>
<tranNr>000011275001</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>00000000131</amt>
<stan>003548</stan>
</tranData>
<cardType>0</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```

DO NOT COPY



7.5.14 Account Verification (with mandatory and conditional fields)

This transaction type is used to verify a cardholder's account information with the card issuer, using mandatory fields only. This transaction type is commonly referred to as a 0-dollar authorization. As such, this transaction cannot be voided or settled.

Different card associations have different requirements for account verification. The following table describes the current requirements.

Card Type	Description
Amex	Address and Zip Code are required
MasterCard	Address is optional but Zip Code is required
Visa	Address and Zip Code are optional
Discover	Address and Zip Code are optional
American Express Account Verifications do not support the submission of a CID/CVV2 value. Any AMEX Account Verification transaction with a CID/CVV2 provided may or may not receive a valid CID response on the transaction. AMEX Address Verification Service is fully supported on Account Verification transactions.	

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 9 = Account Verification Only	M
card.pan	n..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.	M
card.sec	n..4	CVV2/CVC2/CID: This is the 3- or 4-digit card verification code located on the card.	O
card.xprDt	n4, YYMM	Expiration Date: This is the expiration date of the card.	M



contact.addrLn1	ans..50	This is the customer's street address line 1. Conditions: <ul style="list-style-type: none">Address is required for Amex and optional for Visa, MasterCard and Discover.	C
contact.zipCode	ans..9	This is the customer's ZIP code. Conditions: <ul style="list-style-type: none">ZIP code is required for Amex, MasterCard, Discover and is optional for Visa. Note: Hyphen is not allowed for a 9 digit value.	C

Example Request:**Batch Header:**

```
07311      20110526104200000001000
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>9</tranCode>
<card>
<pan>411111*****1111</pan>
<sec>998</sec>
<xprDt>1712</xprDt>
</card>
<contact>
<addrLn1>VictoryParkLane</addrLn1>
<zipCode>75201</zipCode>
</contact>
</SendTranRequest>

2:<?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>9</tranCode>
<card>
<pan>411111*****1111</pan>
<sec>998</sec>
```



```
<xprDt>1712</xprDt>
</card>
<contact>
<addrLn1>VictoryParkLane</addrLn1>
<zipCode>75201</zipCode>
</contact>
</SendTranRequest>
Batch Trailer:
00000002+00000000000000
```

DO NOT COPY



Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtimemerchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp>
<secRslt>M</secRslt>
<avsRslt>Z</avsRslt>
<aci>N</aci>
<tranId>000000000001345</tranId>
</authRsp>
<tranData>
<swchKey>777777731-000051-5-7708</swchKey>
<tranNr>000011275051</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000000</amt>
<stan>003542</stan>
<auth>PREATH</auth>
</tranData>
<cardType>0</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```

DO NOT COPY



7.5.15 Wallet Sale (with mandatory fields)

This transaction type is used to perform a sale transaction against an existing manual recurring profile (aka wallet), using mandatory fields.

Element	Type	Description	M/C
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
merc.prodType	n1	This is the product type for this particular transaction. Valid Values: <ul style="list-style-type: none">• 4 = ACH• 5 = Credit/Debit Card (Default)	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 14 = Recurring(Manual) Auth/Settle• 0 Auth Only (Only available for credit card transactions)	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
recurMan.id	n..19	This is the Wallet ID.	M

Example Request:

Batch Header:

```
07311      20110526104200000001000
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtme/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>14</tranCode>
<reqAmt>030</reqAmt>
<recurMan>
<id>1000002245</id>
</recurMan>
```



```
</SendTranRequest>
</soap:Body>

2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtimemerchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>14</tranCode>
<reqAmt>030</reqAmt>
<recurMan>
<id>1000002245</id>
</recurMan>
</SendTranRequest>
</soap:Body>
```

Batch Trailer:

00000002+000000000060

Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtimemerchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp>
<secRslt>M</secRslt>
<avsRslt>Y</avsRslt>
<tranId>00000000001344</tranId>
<valCode>5M4M</valCode>
</authRsp>
<tranData>
<swchKey>777777731-00051-6-1111</swchKey>
<tranNr>000011275061</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000130</amt>
<stan>003543</stan>
<auth>TAS232</auth>
</tranData>
<cardType>0</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```



7.5.16 Wallet Sale (with mandatory and conditional fields)

This transaction type is used to perform a sale transaction against an existing manual recurring profile (aka wallet), using conditional and optional fields.

NOTE: Fields with an * are to be utilized for Card Holder Authentication purposes.

Element	Type	Description	M/C
merc.id	ans..15	Merchant Gateway ID	M
Merc.inType	n1	This is the input type from which the call is initiated Valid Values: <ul style="list-style-type: none">• 2 = Batch	
merc.prodType	n1	This is the product type for this particular transaction. Valid Values: <ul style="list-style-type: none">• 4 = ACH• 5 = Credit/Debit Card (Default)	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 14 = Recurring(Manual) Auth/Settle• 0 Auth Only (Only available for credit card transactions)	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
usrDef.name	ans..50	This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O
usrDef.val	ans..4000	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
pos.pmtDesc	ans..25	Soft Descriptor: This is a per-transaction description of the payment that is passed to the consumer's credit card statement to identify where a purchase was made or to include information such as the category of goods purchased If the merchant is not configured to allow soft descriptors, this value will be ignored and the Merchant DBA Name will appear on the consumer's credit card statement instead	O



indCode	n1	<p>The Industry Code that overrides the Merchant Profile information for this particular transaction. Applies to credit card wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct marketing <p>Conditions:</p> <ul style="list-style-type: none">• This is only applicable when Merc.prodType = 5.	
authReq.purcCard.mercOrdNr	ans..17	<p>This is the merchant's purchase order number.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• This is only applicable when Merc.prodType = 5. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction and passing tax amount includes tax indicator.</p>	C
authReq.purcCard.billShip.type	n1	<p>This is the ShipToZipCode type.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 3 = Ship to <p>Conditions:</p> <ul style="list-style-type: none">• This element is only applicable to AMEX transactions <p>Note: A default type of 3 is set if the type is not provided.</p>	C
authReq.purcCard.billShip.contact.zipCode	ans..9	<p>This is the ship to zip code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is applicable/required for AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
authReq.xid(*)	20-byte (160 bit) binary number	<p>Unique tracking number generated by the merchant server to identify the transaction and prevent resubmission/replay. This is in binary format.</p> <p>Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.</p>	O



authReq.cavv(*)	an..40	Cryptographic value that proves Visa cardholder was authenticated. This is in hexadecimal format Conditions: <ul style="list-style-type: none">Required for Visa transactions if cadlIndicator = 2If set when cadlIndicator = 0 or 1, transaction will be rejectedOnly applies for Visa transactionsOptional if indCode=2 ECOM. Only eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ucafldcr(*)	n1	Cardholder Authentication Data Collection (CADC) indicator. Valid Values: <ul style="list-style-type: none">0 = CADC is not supported at the merchant's web site1 = CADC is supported by the merchant, but CAVV/UCAF data was not populated2 = CADC is supported by the merchant, and CAVV/UCAF data was populated Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ucaf(*)	an..64	Cryptographic value that proves MasterCard cardholder was authenticated. This is in hexadecimal format. Conditions: <ul style="list-style-type: none">Required for MasterCard transactions if cadlIndicator = 2If set when cadlIndicator = 0 or 1, transaction will be rejectedOnly applies for MasterCard transactions Note: Only indCode= 2 ECOM/eCommerce transactions may contain Cardholder Authentication data elements.	C
authReq.ordNr	ans..50	This is the customer reference ID (order number) assigned to this transaction. This field is required for Interchange qualification of MOTO and eCommerce transactions. Note: If not provided, the System Transaction ID is saved in this field to ensure interchange qualification.	O
recurMan.id	n..19	This is the Wallet ID.	M



recurMan.seccCode	n1	<p>This identifies the authorization type for the ACH transaction. Applies to ACH wallets only.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Telephone (TEL)• 1 = Internet (WEB)• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD)	C
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C

Example Request:**Batch Header:**

07311 20110526104200000001000
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
<prodType>5</prodType>
</merc>
<tranCode>14</tranCode>
<reqAmt>0100</reqAmt>
<usrDef>
<name>Miscellaneous Field 1</name>
<val>Test13</val>
</usrDef>
<pos>
<pmtDesc>SOFTDescriptor</pmtDesc>



```
</pos>
<indCode>0</indCode>
<tranFlags>
<dupChkTmPrd>20</dupChkTmPrd>
</tranFlags>
<authReq>
<xid>46616b652058494420666f722074657374696e67</xid>
<cavv>54657374205669736120434156562076616c7565</cavv>
<ucafldcr>2</ucafldcr>
<ordNr>Invoice @</ordNr>
</authReq>
<recurMan>
<id>1000002245</id>
</recurMan>
<tax>
<idcr>1</idcr>
<amt>0001</amt>
</tax>
</SendTranRequest>
</soap:Body>

2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
<prodType>5</prodType>
</merc>
<tranCode>14</tranCode>
<reqAmt>030</reqAmt>
<usrDef>
<name>Miscellaneous Field 1</name>
<val>Test13</val>
</usrDef>
<indCode>0</indCode>
<authReq>
<xid>46616b652058494420666f722074657374696e67</xid>
<cavv>54657374205669736120434156562076616c7565</cavv>
<ucafldcr>2</ucafldcr>
<ordNr>Invoice @</ordNr>
</authReq>
<recurMan>
<id>1000002245</id>
</recurMan>
<tax>
<idcr>1</idcr>
```



```
</tax>
</SendTranRequest>
</soap:Body>
```

Batch Trailer:

00000002+000000000130

Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtimemerchantframework/xsd/v1">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp>
<secRslt>M</secRslt>
<avsRslt>Y</avsRslt>
<tranId>00000000001344</tranId>
<valCode>5M4M</valCode>
</authRsp>
<tranData>
<swchKey>777777731-00051-6-1111</swchKey>
<tranNr>000011275061</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>00000000130</amt>
<stan>003543</stan>
<auth>TAS232</auth>
</tranData>
<cardType>0</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```



7.5.17 Settle (with mandatory and conditional fields)

For credit card transactions, settlement occurs at the completion of transaction processing between the involved financial institutions and processing entities, and when the funds for the credit card transaction have been successfully deposited into the merchant's bank account. For an eCheck.Net® transaction, settlement occurs when the payment gateway submits a request to the ACH Network on behalf of the merchant for the collection of bank account funds for a purchase.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	This is the input type from which the call is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 3 = Settle Only	M
reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required when settling a transaction with an amount that is different than its original authorization.	C
tranFlags.mgdSettle	a1	Reserved for Future Use -This indicates the transaction is a Managed Settlement request. Note: All subsequent transactions will contain the original transaction data. Valid values: Y, N Conditions: <ul style="list-style-type: none">• If the merchant is not configured to allow managed settlement, do not send this field. If indCode = 1 (Retail), this field must be set to 'N'	C
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

Example Request:

Batch Header:



```
07311      20110526104200000001000
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtimemerchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>3</tranCode>
<reqAmt>040</reqAmt>
<tranFlags>
<v1:mgdSettle>N</v1:mgdSettle>
</tranFlags>
<origTranData>
<tranNr>000000190271</tranNr>
</origTranData>
</SendTranRequest>

2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtimemerchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>3</tranCode>
<reqAmt>040</reqAmt>
<origTranData>
<tranNr>000000190271</tranNr>
</origTranData>
</SendTranRequest>
```

Batch Trailer:

00000002+000000000080

Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtimemerchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>7777777731-000051-11-0000</swchKey>
<tranNr>000011275011</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>00000000131</amt>
<stan>003549</stan>
<auth>TAS225</auth>
</tranData>
```



```
<cardType>0</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```

DO NOT COPY



7.5.18 Settle Void (with mandatory fields)

This transaction is used to cancel a previous Settle Only request not yet closed for settlement, using mandatory fields. This transaction type prevents a transaction from being sent for settlement.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID.	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranCode	n..2	Transaction Code: This indicates the type of transaction. Valid Values: <ul style="list-style-type: none">• 6 = Settle Void for Auth and Settle	M
tranFlags.revAuthOnVoid	n1	This flag enables the ability to control the availability of the auth when submitting a settle void request. Valid values: <ul style="list-style-type: none">• 0 = Do not reverse the Auth• 1 = Reverse the Auth	M
origTranData.tranNr	n..19	Transaction Number: This is the transaction reference number assigned by the platform. It is used to assist in locating the original transaction and/or record. The minimum character length is 2.	M

Example Request:

Batch Header:

```
07311      20110526104200000001000
1:<?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>3</tranCode>
<reqAmt>0040</reqAmt>
<tranFlags>
<v1:mgdSettle>N</v1:mgdSettle>
</tranFlags>
<origTranData>
```



```
<tranNr>000000190271</tranNr>
</origTranData>
</SendTranRequest>
```

```
2: <?xml version="1.0" encoding="UTF-8"?>
<SendTranRequest xmlns="http://postilion/realtme/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranCode>6</tranCode>
<origTranData>
<tranFlags>
<revAuthOnVoid>0</revAuthOnVoid>
</tranFlags>
<tranNr>000001677631</tranNr>
</origTranData>
</SendTranRequest>
```

Batch Trailer:

00000002+000000000000

Example Response:

```
1: <?xml version="1.0" encoding="UTF-8"?>
<SendTranResponse xmlns="http://postilion/realtme/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
<rspCodeMsg>Approved or completed successfully</rspCodeMsg>
<authRsp/>
<tranData>
<swchKey>777777731-000051-8-0000</swchKey>
<tranNr>000011274971</tranNr>
<dtTm>2016-05-17T11:02:11.000-07:00</dtTm>
<amt>000000000130</amt>
<stan>003546</stan>
<auth>TAS222</auth>
</tranData>
<cardType>0</cardType>
<mapCaid>555526222400000</mapCaid>
</SendTranResponse>
```



7.6 Recurring Payments

The Merchant Web Service functions in this section are used to add or update customers, wallets or recurring profiles. Customers, wallets and recurring profiles are unique per Gateway ID.

7.6.1 Create/Update Customer and Wallet Details

This transaction type is used to add/update a customer and a wallet profile in a single request.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
merc.prodType	n1	This is the product type. Valid Values: <ul style="list-style-type: none">• 4 = ACH• 5 = Debit Card/Credit Card	M
cust.type	n1	This is the customer update type. Valid Values: <ul style="list-style-type: none">• 0 = Add• 1 = Update	M
contact.fullName	ans..61	This is the customer's full name. Conditions: <ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
contact.coName	ans..30	This is the customer's company name.	O



phone.type	n1	<p>This is the type of contact number.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C
phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 character.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• - <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	O
contact.addrLn1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	C
contact.addrLn2	ans..50	<p>This is the customer's street address line 2.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O
contact.city	ans..40	<p>This is the customer's city.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O
contact.state	a2	<p>This is the customer's state. Values must be in all CAPS.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O



contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
contact.ctry	a2	This is the customer's country. The only permitted value is US.	O
contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
contact.type	n1	<p>This is an indicator of where the customer profile information is used.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Recurring	M
contact.stat	n1	<p>This is the status of the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active <p>Conditions:</p> <ul style="list-style-type: none">• This only applies to recurring and wallet web service functions when updating an existing customer, wallet, or recurring record.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
pmt.type	n1	<p>This is the wallet update type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Add	M



card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• New or masked card.pan must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file..	C
card.xprDt	n4, YYMM	<p>Expiration Date: This is the expiration date of the card.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
card.dbtOrCdt	n1	<p>This indicates whether the card is a debit or credit card.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Credit <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 5.	O
pmt.ordNr	ans..50	<p>This is the customer reference number.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
ach.bankRtNr	n9	<p>This is the routing number of the customer's bank.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



ach.acctNr	n..17	<p>This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
ach.acctType	n1	<p>Type of customer account.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 4. <p>Note: This element defaults to 0 = Checking.</p>	M
pmt.desc	ans..50	<p>This is the wallet reference number.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
pmt.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular wallet's transactions. Applies to credit card wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO <p>Note: This is conditional when credit card is selected.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• This field can only be passed and stored at the wallet level when creating /updating a customer and/or wallet only.	C



pmt.status	n1	<p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
------------	----	--	---

Example Request:**Batch Header:**

07311 20160825010000000028000
1: <?xml version="1.0" encoding="UTF-8"?><UpdtRecurrProfRequest
xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<cust>
<type>0</type>
<contact>
<fullName>Scott</fullName>
<coName>Connex Info Systems</coName>
<phone>
<type>3</type>
<nr>5555555555</nr>
</phone>
<addrLn1>J.P Nagar</addrLn1>
<addrLn2>3rd Phase</addrLn2>
<city>Denver</city>
<state>CO</state>
<zipCode>909090909</zipCode>
<ctry>US</ctry>
<email>info@info.com</email>
<type>1</type>
<stat>1</stat>
</contact>
<pmt>
<type>0</type>
<card>
<pan>4485896261017708</pan>
<xprDt>2001</xprDt>
<dbtOrCdt>1</dbtOrCdt>
</card>



```
<ordNr>12345</ordNr>
<desc>Scott Wallet</desc>
<indCode>0</indCode>
<status>1</status>
</pmt>
</cust>
</UpdtRecurrProfRequest>
>
```

Batch Trailer:

00000001+00000000000000

Example Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<UpdtRecurrProfResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<custId>1000002315</custId>
<pmtId>1315276854356105080</pmtId>
<rspCode>00</rspCode>
</UpdtRecurrProfResponse>
```

DO NOT COPY



7.6.2 Create Wallet Details

This transaction type is used to add a new wallet to an existing customer id. A customer is required before adding a wallet, and a wallet is required before adding a recurring profile.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 2 = Batch	M
merc.prodType	n1	<p>This is the product type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 4 = ACH• 5 = Debit Card/Credit Card	M
contact.id	ans..25	<p>This is the existing customer ID associated with this wallet.</p> <p>Conditions:</p> <ul style="list-style-type: none">• Required when pmt.type is set to 1, when adding wallets to an existing contact.id and when updating an existing contact.id.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
pmt.type	n1	<p>This is the wallet update type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Add	M
card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• New or masked card.pan must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



card.xprDt	n4, YYMM	<p>Expiration Date: This is the expiration date of the card.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
card.dbtOrCdt	n1	<p>This indicates whether the card is a debit or credit card.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Credit <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 5.	O
pmt.ordNr	ans..50	<p>This is customer reference ID.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
ach.bankRtNr	n9	<p>This is the routing number of the customer's bank.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
ach.acctNr	n..17	<p>This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
ach.acctType	n1	<p>Type of customer account.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 4. <p>Note: This element defaults to 0 = Checking.</p>	M



pmt.desc	ans..50	<p>This is the wallet reference number.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
pmt.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular wallet's transactions. Applies to credit card wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO <p>Note: This is conditional when credit card is selected.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• This field can only be passed and stored at the wallet level when creating /updating a customer and/or wallet only.	C
pmt.status	n1	<p>This indicates the status of the wallet.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C

***Example Request:******Batch Header:***

```
07311      20110825010000000028000
1:<?xml version="1.0" encoding="UTF-8"?><UpdtRecurrProfRequest
xmlns="http://postilion/realtme/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<cust>
<type>1</type>
<contact>
<id>1315270297974159982</id>
</contact>
<pmt>
<type>0</type>
<card>
<pan>4485896261017708</pan>
<xprDt>2020</xprDt>
<dbtOrCdt>1</dbtOrCdt>
</card>
<ordNr>12345</ordNr>
<desc>Scott Wallet</desc>
<indCode>0</indCode>
<status>1</status>
</pmt>
</cust>
</UpdtRecurrProfRequest>
```

Batch Trailer:

00000001+00000000000000

Example Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<UpdtRecurrProfResponse xmlns="http://postilion/realtme/merchantframework/xsd/v1/">
<pmtId>1000002519</pmtId>
<rspCode>00</rspCode>
</UpdtRecurrProfResponse>
```



7.6.3 Update Wallet Details

This transaction type is used to update an existing wallet to an existing customer. A customer is required before adding a wallet, and a wallet is required before adding a recurring profile.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 2 = Batch	M
merc.prodType	n1	<p>This is the product type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 4 = ACH• 5 = Debit Card/Credit Card	M
contact.id	ans..25	<p>This is the existing customer ID associated with this wallet.</p> <p>Conditions:</p> <ul style="list-style-type: none">• Required when pmt.type is set to 1, when adding wallets to an existing contact.id and when updating an existing contact.id.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
pmt.id	n..9	<p>This is the wallet ID.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required when pmt.type is set to 1.	C
pmt.type	n1	<p>This is the wallet update type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Update	M



card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• New or masked card.pan must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
card.xprDt	n4, YYMM	<p>Expiration Date: This is the expiration date of the card.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
card.dbtOrCdt	n1	<p>This indicates whether the card is a debit or credit card.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Credit <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 5.	O
pmt.ordNr	ans..50	<p>This is customer reference ID.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
ach.bankRtNr	n9	<p>This is the routing number of the customer's bank.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



ach.acctNr	n..17	<p>This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
ach.acctType	n1	<p>Type of customer account.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 4. <p>Note: This element defaults to 0 = Checking.</p>	M
pmt.desc	ans..50	<p>This is the wallet reference number.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
pmt.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular wallet's transactions. Applies to credit card wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO <p>Note: This is conditional when credit card is selected.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• This field can only be passed and stored at the wallet level when creating /updating a customer and/or wallet only.	C



pmt.status	n1	<p>This indicates the status of the wallet.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
------------	----	--	---

***Example Request:******Batch Header:***

```
07311      20110825010000000028000
1:<?xml version="1.0" encoding="UTF-8"?><UpdtRecurrProfRequest
xmlns="http://postilion/realtimemerchantframework/xsd/v1">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<cust>
<contact>
<id>1315270297974159982</id>
</contact>
<pmt>
<id>1315276854356105080</id>
<type>1</type>
<card>
<pan>549974*****0057</pan>
<xprDt>2020</xprDt>
<status>0</status>
</pmt>
</cust>
</UpdtRecurrProfRequest>
```

Batch Trailer:

00000001+000000000000

Example Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<UpdtRecurrProfResponse xmlns="http://postilion/realtimemerchantframework/xsd/v1">
<rspCode>00</rspCode>
</UpdtRecurrProfResponse>
```



7.6.4 Create/Update Recurring Details

This transaction type is used to add a new recurring profile or update an existing recurring profile to an existing customer. A customer with an existing wallet is required before adding a recurring profile.

Note: A recurring profile cannot be updated or reactivated after the payment terms are complete.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 2 = Batch	M
recurProf.recurProfId	n19	<p>This is the recurring profile ID.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required when recurProf.type is set to 1.	C
recurProf.type	n1	<p>This is the recurring profile update type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Add• 1 = Update	M
recur.recurProfStat	n1	<p>This is the status of the recurring profile.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.dbtOrCdt	n1	<p>This indicates this is a recurring debit (sale) transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Debit	M



recur.amt	n..12	<p>This is the amount of the recurring transaction (in minor denomination).</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.nrOfPmt	n2	<p>This indicates the number of scheduled payments and only applies to automatic recurring payments. This does not impact a wallet/manual recurring payment.</p> <p>Conditions:</p> <ul style="list-style-type: none">• If this is not set, the payments are scheduled indefinitely.• This must be set to 1 if blngCyc is set to 90 (Single Payment).• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.startDt	dateTime	<p>This is the date of the first scheduled recurring payment. This is also known as the effective date. Ex: YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time and the date time cannot be set in the past</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.blngCyc	n2	<p>This is the frequency of the recurring payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 00 = Daily• 10 = Weekly• 20 = Every 2 weeks• 30 = Every 4 weeks• 40 = Every 8 weeks• 51 = Specified day of the month• 52 = Last day of the month• 60 = Every 3 months• 70 = Quarterly• 80 = Yearly• 90 = Single Payment <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recur.desc	an..25	<p>This is the recurring profile reference number.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.custId	n..9	This is the existing customer ID associated with this recurring profile.	M
recur.pmtId	n..9	This is the existing wallet ID associated with this recurring profile.	M
recur.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular recurring profile's transactions. Applies to credit card recurring profiles only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.ordNr	ans..50	<p>This is the customer reference number of the recurring profile.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.purcOrdNr	ans..50	<p>This is the merchant's purchase order number for the recurring record.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
recur.shipToZipCode	ans..9	<p>This is the ship to zip code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is applicable/required for AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C



usrDef.name	ans..50	This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O
usrDef.val	ans..400 0	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Nontaxable• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction.</p>	C
recur.seccCode	n1	<p>This identifies the authorization type for the transaction. Applies to ACH wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• This element is only used when merc.prodType = 4.	C



DO NOT COPY

***Example Request:******Batch Header:***

07311 20110825010000000028000

```
1: <?xml version="1.0" encoding="UTF-8"?><UpdtRecurrProfRequest  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/">  
<merc>  
<id>7311</id>  
<inType>2</inType>  
</merc>  
<recurrProf>  
<type>0</type>  
<recurr>  
<recurrProfStat>1</recurrProfStat>  
<dbtOrCdt>0</dbtOrCdt>  
<amt>02333</amt>  
<nrOfPmt>12</nrOfPmt>  
<startDt>2017-06-15T00:00:00.000+05:00</startDt>  
<bLngCyc>50</bLngCyc>  
<desc>RecurProf</desc>  
<custId>1315270297974159982</custId>  
<pmtId>1315271377706182291</pmtId>  
<indCode>0</indCode>  
<ordNr>12345</ordNr>  
<usrDef>  
<name>First Name</name>  
<val>Scott</val>  
</usrDef>  
<tax>  
<idcr>1</idcr>  
<amt>02333</amt>  
</tax>  
</recurr>  
</recurrProf>  
</UpdtRecurrProfRequest>
```

Batch Trailer:

00000001+000000000000

Example Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>  
<UpdtRecurrProfResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">  
<id>1315275692201136582</id>  
<rspCode>00</rspCode>  
</UpdtRecurrProfResponse>
```



7.6.5 Create/Update Customer, Wallet, Recurring Details

This transaction type is used to add/update a customer, wallet and recurring profile in a single request.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.inType	n1	<p>Input Type: This is the input type from which the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 2 = Batch	M
merc.prodType	n1	<p>This is the product type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 4 = ACH• 5 = Debit Card/Credit Card	M
cust.type	n1	<p>This is the customer update type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Add• 1 = Update	M
contact.fullName	ans..61	<p>This is the customer's full name.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
contact.coName	ans..30	This is the customer's company name.	O
phone.type	n1	<p>This is the type of contact number.</p> <p>Valid values:</p> <ul style="list-style-type: none">• 0 = Home phone number• 1 = Fax number• 2 = Mobile phone number• 3 = Work phone number• 4 = Other <p>Conditions:</p> <ul style="list-style-type: none">• Type of customer phone number is only needed when a customer phone number is provided.	C



phone.nr	ans..12	<p>This is the customer's phone number. Phone number cannot be less than 10 or more than 12 character.</p> <p>Valid special character:</p> <ul style="list-style-type: none">• - <p>Note: ACH phone number format is 234-235-5678 is valid, 234-911-5678 is invalid, because the exchange code cannot be in the form N11.123-234-5678 is invalid, because NPA cannot begin with 0 or 1. See Note ** NANP (ACH Phone number) in the ACH fraud check table appendix.</p>	O
contact.addrLn1	ans..50	<p>This is the customer's street address line 1.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	C
contact.addrLn2	ans..50	<p>This is the customer's street address line 2.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O
contact.city	ans..40	<p>This is the customer's city.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O
contact.state	a2	<p>This is the customer's state. Values must be in all CAPS.</p> <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p>	O



contact.zipCode	ans..9	<p>This is the customer's ZIP code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This is required to participate in the address verification service (AVS) and highly recommended for appropriate card not present qualification.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: For ACH, please refer to ACH Fraud Check Values for additional information.</p> <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
contact.ctry	a2	This is the customer's country. The only permitted value is US.	O
contact.email	ans..75	<p>This is the customer's email address.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• .• -• %• +• -• @ <p>Note: A special character cannot be the first character in this field.</p>	O
contact.type	n1	<p>This is an indicator of where the customer profile information is used.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Recurring	M
contact.stat	n1	<p>This is the status of the customer.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active <p>Conditions:</p> <ul style="list-style-type: none">• This only applies to recurring and wallet web service functions when updating an existing customer, wallet, or recurring record.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
pmt.type	n1	<p>This is the wallet update type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Add	M



card.pan	n..19	<p>Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• New or masked card.pan must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file..	C
card.xprDt	n4, YYMM	<p>Expiration Date: This is the expiration date of the card.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 5.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
card.dbtOrCdt	n1	<p>This indicates whether the card is a debit or credit card.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Credit <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 5.	O
pmt.ordNr	ans..50	<p>This is the customer reference number.</p> <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
ach.bankRtNr	n9	<p>This is the routing number of the customer's bank.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



ach.acctNr	n..17	<p>This is the customer's checking/savings account number. Note: Account Number length requirements per NACHA . Minimum of 4 digits with a maximum of 17 digits.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is mandatory when merc.prodType = 4• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
ach.acctType	n1	<p>Type of customer account.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Checking• 1 = Savings <p>Conditions:</p> <ul style="list-style-type: none">• This element is only used when merc.prodType = 4. <p>Note: This element defaults to 0 = Checking.</p>	M
pmt.desc	ans..50	<p>This is the wallet reference number.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
pmt.status	n1	<p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recurProf.type	n1	<p>This is the recurring profile update type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Add	M
recur.recurProfStat	n1	<p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Inactive• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recur.dbtOrCdt	n1	This indicates whether this is a recurring debit (sale) transaction. Valid Values: <ul style="list-style-type: none">• 0 = Debit	M
recur.amt	n..8	This is the amount of the recurring transaction (in minor denomination). Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.nrOfPmt	n2	This indicates the number of scheduled payments and only applies to automatic recurring payments. This does not impact a wallet/manual recurring payment. Conditions: <ul style="list-style-type: none">• If this is not set, the payments are scheduled indefinitely.• This must be set to 1 if bIngCyc is set to 90 (Single Payment).• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.startDt	dateTime	This is the date of the first scheduled recurring payment. This is also known as the effective date. Ex: YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time and the date time cannot be set in the past Condition: <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recur.blngCyc	n2	<p>This is the frequency of the recurring payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 00 = Daily• 10 = Weekly• 20 = Every 2 weeks• 30 = Every 4 weeks• 40 = Every 8 weeks• 51 = Specified day of the month• 52 = Last day of the month• 60 = Every 3 months• 70 = Quarterly• 80 = Yearly• 90 = Single Payment <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.desc	an..25	<p>This is the recurring profile reference number.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular recurring profile's transactions. Applies to credit card recurring profiles only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.ordNr	ans..50	<p>This is the customer reference number of the recurring profile.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recur.purcOrdNr	ans..50	<p>This is the merchant's purchase order number for the recurring record.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
recur.shipToZipCode	ans..9	<p>This is the ship to zip code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is applicable/required for AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
usrDef.name	ans..50	<p>This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.</p>	O
usrDef.val	ans..4000	<p>This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.</p>	O
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Nontaxable• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C



tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction.</p>	C
recur.seccCode	n1	<p>This identifies the authorization type for the transaction. Applies to ACH wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 2 = Business to Consumer (PPD)• 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.• This element is only used when merc.prodType = 4.	C

Example Request:**Batch Header:**

07311 20110825010000000028000

```
1: <?xml version="1.0" encoding="UTF-8"?><UpdtRecurrProfRequest  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/">  
<merc>  
<id>7311</id>  
<inType>2</inType>  
</merc>  
<cust>  
<type>0</type>  
<contact>  
<fullName>Scott</fullName>  
<coName>Connex Info Systems</coName>  
<phone>  
<type>3</type>  
<nr>5555555555</nr>
```



```
</phone>
<addrLn1>J.P Nagar</addrLn1>
<addrLn2>3rd Phase</addrLn2>
<city>Bangalore</city>
<state>AK</state>
<zipCode>909090909</zipCode>
<ctry>US</ctry>
<email>scott@scott.com</email>
<type>1</type>
<stat>1</stat>
<note>df</note>
</contact>
<pmt>
<type>0</type>
<card>
<type>0</type>
<pan>4485896261017708</pan>
<xprDt>2001</xprDt>
<dbtOrCdt>1</dbtOrCdt>
</card>
<ordNr>12345</ordNr>
<desc>Scott Wallet</desc>
<status>1</status>
</pmt>
</cust>
<recurProf>
<type>0</type>
<recur>
<recurProfStat>1</recurProfStat>
<dbtOrCdt>0</dbtOrCdt>
<amt>02333</amt>
<nrOfPmt>12</nrOfPmt>
<startDt>2017-06-05T00:00:00.000+05:00</startDt>
<blngCyc>50</blngCyc>
<desc>fgdgfg</desc>
<indCode>0</indCode>
<ordNr>12345</ordNr>
<usrDef>
<name>First Name</name>
<val>Scott</val>
</usrDef>
<tax>
<idcr>1</idcr>
<amt>02333</amt>
</tax>
</recur>
```



```
</recurProf>  
</UpdtRecurrProfRequest>
```

Batch Trailer:

```
00000001+00000000000000
```

DO NOT COPY



Example Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<UpdtRecurrProfResponse xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<id>1000001395</id>
<custId>1000002326</custId>
<pmtId>1000002525</pmtId>
<rspCode>00</rspCode>
</UpdtRecurrProfResponse>
```

DONOTCOPY



7.6.6 Update Customer

This transaction type is used to update a customer to an inactive status that in turn deactivates all wallet and recurring id profiles in a single request.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
contact.id	ans.25	This is the existing customer ID associated with this wallet. Conditions: <ul style="list-style-type: none">• Required when pmt.type is set to 1, when adding wallets to an existing contact.id and when updating an existing contact.id.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
contact.fullName	ans..61	This is the customer's full name. Conditions: <ul style="list-style-type: none">• This is mandatory when merc.prodType = 4.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	M
contact.type	n1	This is an indicator of where the customer profile information is used. Valid Values: <ul style="list-style-type: none">• 1 = Recurring	M
contact.stat	n1	This is the status of the customer. Valid Values: <ul style="list-style-type: none">• 0 = Inactive	M



Example Request:

Batch Header:

```
07311      20160825010000000028000
1:<?xml version="1.0" encoding="UTF-8"?><UpdtRecurrProfRequest
xmlns="http://postilion/realtme/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<cust>
<type>0</type>
<contact>
<fullName>Scott</fullName>
<type>1</type>
<stat>0</stat>
</contact>
</cust>
</UpdtRecurrProfRequest>
```

Batch Trailer:

00000001+0000000000000000

Example Response:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<UpdtRecurrProfResponse xmlns="http://postilion/realtme/merchantframework/xsd/v1/">
<rspCode>00</rspCode>
</UpdtRecurrProfResponse>
```



7.6.7 Create Customer and Wallet Details with Transaction Number (tranNr)

This transaction type is used to create a customer and wallet by using the transaction number returned on an approved credit card sale, an approved ACH transaction where the transaction may have been executed at any time in the last 13 months. Note: This method uses the RecurrProfFromTran call.

IMPORTANT Development Note: After successfully creating the customer and wallet, you will need to submit an update call to add the address, zip code and indCode to the customer and wallet profiles.

This feature is currently unavailable for card not present transactions/hand keyed.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
type	n..1	This is an indicator of where the customer profile information is used. Valid Values: <ul style="list-style-type: none">• 1 = Recurring	M
tranNr	n..19	Unique ID generated when the original sale transaction is processed. The TranNr received in the transaction response corresponds/maps to the transaction id required for this report.	M

Example Request:

Batch Header:

07311 2016082501000000028000

Batch Record:

```
1: <?xml version="1.0" encoding="UTF-8"?><RecurrProfFromTranRequest  
xmlns="http://postilion/realtime/merchantframework/xsd/v1/">  
<merc>  
<id>7311</id>  
<inType>2</inType>  
</merc>  
<tranNr>11743831</tranNr>  
</RecurrProfFromTranRequest>
```

Example Response:

**Batch Trailer:**

00000001+000000000000

Batch Record:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<RecurrProfFromTranResponse
xmlns="http://postilion/realtme/merchantframework/xsd/v1/">
<custId>1453230677405117794</custId>
<pmtId>1453230677421162962</pmtId>
<rspCode>00</rspCode>
</RecurrProfFromTranResponse>
```

7.6.8 Create Customer, Wallet and Recurring Details with Transaction Number (tranNr)

This transaction type is used to create a customer, wallet and recurring detail by using the transaction number returned on an approved credit card sale, an approved ACH transaction where the transaction may have been executed at any time in the last 13 months. Note: This method uses the RecurrProfFromTran call.

IMPORTANT Development Note: After successfully creating the customer, wallet and recurring tokens, you will need to submit an update call to add the address and zip code to the customer profile.

This feature is currently unavailable for card not present transactions/hand keyed.

Element	Type	Description	M/C/O
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 2 = Batch	M
tranNr	n..19	Unique ID generated when the original sale transaction is processed. The TranNr received in the transaction response corresponds/maps to the transaction id required for this report.	M
recurProf.type	n1	This is the recurring profile update type. Valid Values: <ul style="list-style-type: none">• 0 = Add	M



recur.recurProfStat	n1	<p>This is the status of the recurring profile.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 1 = Active (Default) <p>Conditions:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.dbtOrCdt	n1	<p>This indicates this is a recurring debit (sale) transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Debit	M
recur.amt	n..12	<p>This is the amount of the recurring transaction (in minor denomination).</p> <p>Conditions:</p> <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.nrOfPmt	n2	<p>This indicates the number of scheduled payments and only applies to automatic recurring payments. This does not impact a wallet/manual recurring payment.</p> <p>Conditions:</p> <ul style="list-style-type: none">• If this is not set, the payments are scheduled indefinitely.• This must be set to 1 if bIngCyc is set to 90 (Single Payment).• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.startDt	dateTime	<p>This is the date of the first scheduled recurring payment. This is also known as the effective date. Ex: YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time and the date time cannot be set in the past</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recur.blngCyc	n2	<p>This is the frequency of the recurring payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 00 = Daily• 10 = Weekly• 20 = Every 2 weeks• 30 = Every 4 weeks• 40 = Every 8 weeks• 51 = Specified day of the month• 52 = Last day of the month• 60 = Every 3 months• 70 = Quarterly• 80 = Yearly• 90 = Single Payment <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.desc	an..25	<p>This is the recurring profile reference number.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.indCode	n1	<p>This is the Industry Code that overrides the merchant profile information for this particular recurring profile's transactions. Applies to credit card recurring profiles only.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Direct Marketing / MOTO <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C
recur.ordNr	ans..50	<p>This is the customer reference number of the recurring profile.</p> <p>Condition:</p> <ul style="list-style-type: none">• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file.	C



recur.purcOrdNr	ans..50	<p>This is the merchant's purchase order number for the recurring record.</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• SP <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C
recur.shipToZipCode	ans..9	<p>This the ship to zip code.</p> <p>Conditions:</p> <ul style="list-style-type: none">• This element is applicable/required for AMEX transactions when shipping products to the cardholder. <p>Note: Hyphen is not allowed for a 9 digit value.</p>	C
usrDef.name	ans..50	This is the name of the name-value pair. For example, in <name>Account Number</name>, Account Number is the name.	O
usrDef.val	ans..400 0	This is the value of the name-value pair. For example, in <val>741258963</val>, 741258963 is the value.	O
tax.idcr	n1	<p>This indicates whether tax has been assessed and was included in the reqAmt.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• 0 = Nontaxable• 1 = Taxable• 2 = Tax-Exempt <p>Conditions:</p> <ul style="list-style-type: none">• This is required for purchase card transactions.• All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send a value in this field unless you are processing a corporate/purchase card transaction.</p>	C



tax.amt	n..8	<p>This is the amount of tax collected and included in the reqAmt.</p> <p>Conditions:</p> <ul style="list-style-type: none"> • No special characters are allowed. • A leading zero is required. • This is required for purchase card transactions. • All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. <p>Note: Do not send this field unless you are processing a corporate/purchase card transaction.</p>	C
recur.seccCode	n1	<p>This identifies the authorization type for the transaction. Applies to ACH wallets only.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • 2 = Business to Consumer (PPD) • 3 = Business to Business (CCD) <p>Conditions:</p> <ul style="list-style-type: none"> • All conditional fields must be present at the time of the update. Otherwise, the existing stored data is overwritten. You can call the FindRecurrProf web service method to query the stored data on file. • This element is only used when merc.prodType = 4. 	C

Example Request:

Batch Header:

07311 2016082501000000028000

Batch Record:

```

1: <?xml version="1.0" encoding="UTF-8"?><RecurrProfFromTranRequest
xmlns="http://postilion/realtime/merchantframework/xsd/v1/">
<merc>
<id>7311</id>
<inType>2</inType>
</merc>
<tranNr>11743901</tranNr>
<recurrProf>
<type>0</type>
<recurr>
<recurrProfStat>1</recurrProfStat>
<dbtOrCdt>0</dbtOrCdt>
<amt>0100</amt>
<nrOfPmt>12</nrOfPmt>
<startDt>2017-06-05T00:00:00.000-07:00</startDt>
<bLngCyc>52</bLngCyc>
<seccCode>2</seccCode>
```



```
</recur>  
</recurProf>  
</RecurrProfFromTranRequest>
```

DO NOT COPY



Example Response:

Batch Trailer:

00000001+000000000000

Batch Record:

```
1:<?xml version="1.0" encoding="UTF-8"?>
<RecurrProfFromTranResponse
xmlns="http://postilion/realtimemerchantframework/xsd/v1/">
<id>1453230308152198134</id>
<custId>1453230677405117794</custId>
<pmtId>1453230677421162962</pmtId>
<rspCode>00</rspCode>
</RecurrProfFromTranResponse>
```

DO NOT COPY



8 Reporting Web Services

This specification instructs programmers about writing software to generate reports through TXP eReports Webservices. In most cases each uses its own method of the Merchant Web Service. Find Customer Details, Find Wallet Details and Find Recurring Details use the FndRecurrProf method. Please note: JSON date format needs to be converted into preferred format of the end user.

8.1 Find Customer Details

This transaction type is used to obtain details about a particular customer profile.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
type	n..1	This is an indicator of where the customer profile information is used. Valid Values: <ul style="list-style-type: none">• 1 = Recurring	M
custCrtा. id	n..20	This is the customer ID.	O
custCrtा. coName	ans..30	This is the customer's company name.	O
custCrtा. fullName	ans..61	This is the customer's full name. Conditions: <ul style="list-style-type: none">• This is only applicable in the UpdtRecurrProf and FndRecurrProf web service functions.	C
custCrtा. stat	n1	This is the status of the customer. Valid Values: <ul style="list-style-type: none">• 0 = Inactive• 1 = Active	O

Example Request:

{



```
"merc": {  
    "id": "9000",  
    "regKey": "K5W7ZP7JHL38THHP",  
    "inType": 1,  
},  
"type": 1,  
"custCrt": {  
    "id": 1431468856670156366,  
    "stat": 1  
},  
}
```

Example Response:

```
{  
    "cust": [ {  
        "contact": {  
            "id": "1431468856670156366",  
            "fullName": "Jen Doe",  
            "addrLn1": "8320",  
            "zipCode": "85284",  
            "type": 1,  
            "stat": 1  
        },  
        "pmt": [ {  
            "id": 1431468856686199785,  
            "card": {  
                "pan": "411111*****1111",  
                "xprDt": "1805",  
                "dbtOrCdt": 1  
            },  
            "ordNr": "VISA TEST",  
            "indCode": 0,  
            "status": 1  
        }]  
    ],  
    "recurProf": [ {  
        "recurProfId": 1431468856701191144,  
        "recur": {  
            "recurProfStat": 2,  
            "dbtOrCdt": 0,  
            "amt": "7",  
            "nrOfPmt": 2,  
            "startDt": "/Date(1431414000000-0700)/",  
            "blngCyc": 0,  
            "desc": "MAY Test",  
            "pmtId": 1431468856686199785,  
            "nextProcDt": "/Date(1431500400000-0700)"/  
        }]  
    ]  
}
```



```
"nrOfPmtRem": 1,  
"nrOfPmtProc": 1,  
"indCode": 0  
}  
}  
}
```

DO NOT COPY



8.2 Find Wallet Details

This transaction type is used to obtain details about a particular wallet profile. Note: Query results will include customer profile information and all wallets tied to that customer.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
type	n..1	This is an indicator of where the customer profile information is used. Valid Values: <ul style="list-style-type: none">• 1 = Recurring	M
pmtCrta.pan	ans..19	Primary Account Number: This is the number printed on the front of a card and is contained within the track data encoded on the magnetic stripe. Conditions: <ul style="list-style-type: none">• The full card.pan must be present at the time of the query.	O
pmtCrta.acctNr	ans..28	This is the customer's checking/savings account number. Conditions: <ul style="list-style-type: none">• The full bank account must be present at the time of the query.	O
pmtCrta.pmtId	n..19	This is the wallet ID.	O
pmtCrta.pmtDesc	ans..50	This is the wallet reference number.	O
pmtCrta.ordNr	ans..50	This is the customer reference ID.	O

Example Request:

```
{  
  "merc": {  
    "id": "9000",  
    "regKey": "K5W7ZP7JHL38THHP",  
    "inType": 1,  
  },  
  "type": 1,  
  "pmtCrta": {  
    "pmtId": 1431468856686199785,  
  }  
}
```



}

DO NOT COPY

***Example Response:***

```
{  
  "cust": [ {  
    "contact": {  
      "id": "1431468856670156366",  
      "fullName": "Jen Doe",  
      "addrLn1": "8320",  
      "zipCode": "85284",  
      "type": 1,  
      "stat": 1  
    },  
    "pmt": [ {  
      "id": 1431468856686199785,  
      "card": {  
        "pan": "411111*****1111",  
        "xprDt": "1805",  
        "dbtOrCdt": 1  
      },  
      "ordNr": "VISA TEST",  
      "indCode": 0,  
      "status": 1  
    }]  
  ],  
  "recurProf": [ {  
    "recurProfId": 1431468856701191144,  
    "recur": {  
      "recurProfStat": 2,  
      "dbtOrCdt": 0,  
      "amt": "7",  
      "nrOfPmt": 2,  
      "startDt": "/Date(1431414000000-0700)/",  
      "blngCyc": 0,  
      "desc": "MAY Test",  
      "pmtId": 1431468856686199785,  
      "nextProcDt": "/Date(1431500400000-0700)/",  
      "nrOfPmtRem": 1,  
      "nrOfPmtProc": 1,  
      "indCode": 0  
    }  
  }]  
}
```



8.3 Find Recurring Details

This transaction type is used to obtain details about a particular recurring profile. Note: Query results will include customer profile information, all wallets and the queried/specific recurring profile.

Note: This web service method can be used to query the stored data for all customer, wallet, and recurring updates.

Element	Type	Description	M
merc.id	ans..15	Merchant Gateway ID	M
merc.regKey	an..16	Merchant Registration Key	M
merc.inType	n1	Input Type: This is the input type from which the request is initiated. Valid Values: <ul style="list-style-type: none">• 1 = Merchant Web Service	M
type	n...1	This is an indicator of where the customer profile information is used. Valid Values: <ul style="list-style-type: none">• 1 = Recurring	M
recurProfCrta.id	n..19	This is the recurring profile ID.	O
recurProfCrta.ordNr	ans..50	This is the customer reference ID.	O

Example Request:

```
{  
  "merc": {  
    "id": "7777777731",  
    "regKey": "K5W7ZP7JHL38THHP",  
    "inType": 1,  
  },  
  "type": 1,  
  "recurProfCrta": {  
    "id": 1431468856701191144,  
  },  
}
```

***Example Response:***

```
{  
  "cust": [ {  
    "contact": {  
      "id": "1431468856670156366",  
      "fullName": "Jen Doe",  
      "addrLn1": "8320",  
      "zipCode": "85284",  
      "type": 1,  
      "stat": 1  
    },  
    "pmt": [ {  
      "id": 1431468856686199785,  
      "card": {  
        "pan": "411111*****1111",  
        "xprDt": "1805",  
        "dbtOrCdt": 1  
      },  
      "ordNr": "VISA TEST",  
      "indCode": 0,  
      "status": 1  
    }]  
  ],  
  "recurProf": [ {  
    "recurProfId": 1431468856701191144,  
    "recur": {  
      "recurProfStat": 2,  
      "dbtOrCdt": 0,  
      "amt": "7",  
      "nrOfPmt": 2,  
      "startDt": "/Date(1431414000000-0700)/",  
      "blngCyc": 0,  
      "desc": "MAY Test",  
      "pmtId": 1431468856686199785,  
      "nextProcDt": "/Date(1431500400000-0700)/",  
      "nrOfPmtRem": 1,  
      "nrOfPmtProc": 1,  
      "indCode": 0  
    }  
  }]  
}
```



8.4 Get Transaction

This method returns all the properties of a transaction by transaction ID. Use this method to get all transaction details with the tranNr. Note: Refund/Credit Amounts lead with a “-“ symbol.

All element paths in this method are prefaced by GetTransaction. For example, GetTransaction.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">•- Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
tranNr	n..19	Unique ID generated when the original sale transaction is processed. The TranNr received in the transaction response corresponds/maps to the transaction id required for this report.	M

Example Request:

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "REGKEY",  
    },  
    "tranNr": 11143401,  
  }  
}
```

***Example Response:***

```
{  
    "ACHResponseMessage": "",  
    "ACHReturnCode": "",  
    "ACHReturnMessage": "",  
    "AccHolderCity": "",  
    "AccHolderEmailAddress": "",  
    "AccHolderName": "",  
    "AccHolderNumber": "479804*****9372",  
    "AccHolderPhoneNumber": "",  
    "AccHolderState": "",  
    "AccHolderStreetAddress1": "",  
    "AccHolderStreetAddress2": "",  
    "AccHolderZip": "",  
    "AuthAmount": 0.01,  
    "AuthCode": "",  
    "AuthDate": "/Date(1461709625147-0700)/",  
    "AuthResponseCode": "01",  
    "AuthResponseMessage": "Refer to card issuer",  
    "AuthorizationStatus": "Declined",  
    "AvsResponseCode": "",  
    "CardAcceptorId": "323004201000000",  
    "CardInputType": 0,  
    "CardInputTypeDesc": "Normal (non-EMV magstripe or keyed)",  
    "CardType": "VISA",  
    "CavvResultCode": "",  
    "CommercialCardType": "",  
    "ConvFeeAmount": 0,  
    "CustomerNumber": "",  
    "CustomerRefId": "",  
    "CustomerServicePhoneNumber": "8006258800",  
    "Cvv2ResponseCode": "",  
    "DecryptedPAN": "",  
    "DeviceId": "",  
    "Eci": "00",  
    "ExpDate": {  
        "MM": "05",  
        "YY": "16"  
    },  
    "ExtendedResponseCode": "",  
    "ExtendedResponseCodeMessage": "",  
    "InitialRecurringPaymentIndicator": "",  
    "InvoiceNumber": "",  
    "Managed": false,  
    "MarketSpecificDataIndicator": "",  
    "MerchantRefNo": "",  
}
```



```
"MiscDetails": [],
"NOCIInformation": "",
"OrderNumber": "",
"PONumber": "",
"PaymentType": "CreditCard",
"PostedDate": "/Date(1461709625147-0700)/",
"PurchaseCardBillShipZip": "",
"ReSubmitted": false,
"RequestedAmount": 0.01,
"ReturnedAcilIndicator": "N",
"RoutingNumber": "",
"SACity": "",
"SAEmailAddress": "",
"SALine1": "",
"SALine2": "",
"SAName": "",
"SAPhone": "",
"SAState": "",
"SAZip": "",
"SECCode": "",
"Source": "WebService",
"Status": "Declined",
"TaxDescription": "",
"TerminalId": "00016789",
"TotalAuthAmount": 0.01,
"TransactionCode": "AuthorizationAndSettle",
"TransactionIdentifier": "000000000002825",
"TransactionTypeIndicator": "1",
"UserId": "",
"ValidationCode": "NA ",
"Voided": false,
"Xid": "",
"isPartialAuthorization": false,
"tranNr": 11143401
}
```



8.5 Get Authorization Summary

This method returns an authorization summary for a given date. This method allows you to use search criteria to filter the results. Note: Refund/Credit Amounts lead with a “-“ symbol. All element paths in this method are prefaced by `GetAuthorizationSummary.objRequest`. For example, `GetAuthorizationSummary.objRequest.Credential.MerchantInfo.MerchantID`.

Element	Type	Description	M/C
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• - Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
SummarySearchCriteria.FromDate	DateTime	This is the start date of the report. Note: <ul style="list-style-type: none">• The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.• When reporting for ACH, the time zone must be set to 0:00. EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. -07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.	M
SummarySearchCriteria.GroupID	ans..15	15 digit GroupID Conditions: <ul style="list-style-type: none">• MerchantID or GroupID must be present in the request.	C
SummarySearchCriteria.InputSource	Enumeration	This is the input type where the authorization request was initiated. Valid Values: <ul style="list-style-type: none">• All• Post• Hosted• WebService• Batch• VirtualTerminal	M



SummarySearchCriteria.MerchantID	ans..15	<p>15-Digit Merchant Gateway ID</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">– <p>Conditions:</p> <ul style="list-style-type: none">You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C
SummarySearchCriteria.Payment type	Enumeration	<p>Identifies the type of payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">AllAllACHAllCreditCardCreditCardDebitCardPurchase CardACHCheckingACHSavingsACHGL (Reserved for future use)	M
SummarySearchCriteria.ToDate	DateTime	<p>This is the end date of the report.</p> <p>Note:</p> <ul style="list-style-type: none">ToDate cannot be set to a current date or future date.The report can be queried for a maximum 62 days at a time.When reporting for ACH, the time zone must be set to 0:00. <p>EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. -07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.</p>	M

***Example Request:***

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
    "SummarySearchCriteria": {  
      "FromDate": "2016-01-01T00:00:00.000-07:00",  
      "InputSource": "VirtualTerminal",  
      "MerchantID": "1234567890",  
      "PaymentType": "All",  
      "ToDate": "2016-01-01T06:59:59.000-07:00"  
    }  
  }  
}
```

Example Response:

```
{  
  "MerchantGroupAuthorizationSummary": [ [  
    {  
      "DataRecordAuthorizationSummary": [  
        {  
          "AmountApproved": 10,  
          "AmountDeclined": 20.28,  
          "CardType": "VISA",  
          "CountApproved": 1,  
          "CountDeclined": 3,  
          "TransType": "Authorization"  
        },  
        {  
          "AmountApproved": 2.31,  
          "AmountDeclined": 0,  
          "CardType": "AmericanExpress",  
          "CountApproved": 2,  
          "CountDeclined": 0,  
          "TransType": "Authorization"  
        }  
      ],  
      "MerchantID": "1234567890",  
      "MerchantName": "Barnes & Noble White"  
    ],  
    "RecordCount": 2  
  }  
}
```



8.6 Get Daily Settlement Summary

This method returns a summary of transactions settled in a single day for a single merchant/group. Note: Refund/Credit Amounts lead with a “-“ symbol.

Element	Type	Description	M/C
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• _ Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
DailySettlementSummarySearchCriteria.FromDate	DateTime	This is the start date of the report. Note: The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date. EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.	M
DailySettlementSummarySearchCriteria.GroupID	ans..15	15 digit GroupID Conditions: <ul style="list-style-type: none">• MerchantID or GroupID must be present in the request.	C
DailySettlementSummarySearchCriteria.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• _ Conditions: <ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. Note: A special character cannot be the first character in this field.	C
DailySettlementSummarySearchCriteria.PaymentTypeCategory	Enumeration	This indicates the payment type. Valid Values: <ul style="list-style-type: none">• All• CreditDebitPurchaseCards	M



Element	Type	Description	M/C
DailySettlementSummarySearchCriteria.ToDate	DateTime	<p>This is the end date of the report.</p> <p>Note: ToDate must not exceed Today's date, so future dates cannot be queried. The report can be queried for a maximum 62 days at a time.</p> <p>EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.</p>	M

Example Request:

```
{
  "Credential": {
    "MerchantInfo": {
      "MerchantID": "1234567890",
      "RegistrationKey": "REGKEY",
    },
  },
  "DailySettlementSummarySearchCriteria": {
    "FromDate": "2016-04-18T00:00:00.000-07:00",
    "MerchantID": "1234567890",
    "PaymentTypeCategory": "All",
    "ToDate": "2016-04-19T23:59:59.000-07:00",
  },
  "tranNr": 9925221,
}
```

Example Response:

```
{
  "DailySettlementSummaryCol": [
    {
      "DailySettlementSummaryCollection": [
        {
          "NoOfTransactions": 1,
          "SettledSummaryCategory": "CreditCard",
          "TotalAmount": 10
        },
        {
          "SettleDate": "/Date(1460962800000-0700)/"
        }
      ]
    }
  ]
}
```



```
    }],
    "SettleDate": "/Date(1461049200000-0700)/"
}
],
"RecordCount": 2
}
```

DO NOT COPY



8.7 Get Daily Transaction Summary

This method returns a single day summary of transactions processed by the merchant/group summarized. This method allows the merchant to pull a transaction summary for any time within the last 13 months. Note: Refund/Credit Amounts lead with a “-“ symbol. All element paths in this method are prefaced by `GetDailyTransactionSummary`. For example, `GetDailyTransactionSummary.Credential.MerchantInfo.MerchantID`.

Element	Type	Description	M/C
<code>Credential.MerchantInfo.MerchantID</code>	<code>ans..15</code>	<p>15-Digit Merchant Gateway ID Valid Special Characters:<ul style="list-style-type: none">•-<p>Note: A special character cannot be the first character in this field.</p></p>	M
<code>Credential.MerchantInfo.RegistrationKey</code>	<code>an..16</code>	Merchant Registration Key	M
<code>DailyTransactionSummarySearchCriteria.FromDate</code>	<code>DateTime</code>	<p>This is the start date of the report. Note: The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date. EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.</p>	M
<code>DailyTransactionSummarySearchCriteria.GroupID</code>	<code>ans..15</code>	<p>15 digit GroupID Conditions:<ul style="list-style-type: none">• MerchantID or GroupID must be present in the request.</p>	C
<code>DailyTransactionSummarySearchCriteria.MerchantID</code>	<code>ans..15</code>	<p>15-Digit Merchant Gateway ID Valid Special Characters:<ul style="list-style-type: none">•-<p>Conditions:<ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data.<p>Note: A special character cannot be the first character in this field.</p></p></p>	C



DailyTransactionSummarySearchCriteria.PaymentTypeCategory	Enumeration	This indicates the payment type. Valid Values: <ul style="list-style-type: none">• All• CreditDebitPurchaseCards	M
DailyTransactionSummarySearchCriteria.ToDate	DateTime	This is the end date of the report. Note: ToDate must not exceed Today's date therefore future dates cannot be queried. The report can be queried for a maximum 62 days at a time. EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.	M



DailyTransactionSummarySearchCriteria.TransactionStatusCol.TransactionStatusEnum	Enumeration	<p>This field identifies the transaction status.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• All• Approved• ApprovedNotSettled• ApprovedMarkedForSettlement• Declined• Voided/ReversedAuthorization• Settled• Refunded• AllDeclined(includes Declined, BO Exception and Declined Downloaded)• AllReturned(includes Returned, Credit Returned, NSF, ChargeBack and Invalid)• Processed• Originated(includes Originated and Credit Originated)• Funded(includes Funded and Credit Funded)• Returned(includes Returned and Credit Returned)• NSF• ChargeBack• Invalid• DeclinedAch• Refund• Credit• Incomplete• Cancelled• BOException• Downloaded(includes Downloaded and Credit Downloaded)• CreditOriginated• CreditDownloaded• CreditReturn• CreditFunded• DeclinedDownloaded• SettlementInProgress• DeclinedResponseCodeMonitoring• RefundedAch• FirstRecycle• SecondRecycle• FailedRecycle• Authentication <p>Note: When a field is defined as Col a collection/multiple valid values can be queried within a single request.</p>	M
--	-------------	--	---

**Example Request:**

```
{  
    "Credential": {  
        "MerchantInfo": {  
            "MerchantID": "1234567890",  
            "RegistrationKey": "MNLPYTT6EDP9HP7H",  
        },  
    },  
    "DailyTransactionSummarySearchCriteria": {  
        "FromDate": "2016-01-01T00:00:00.000-07:00",  
        "MerchantID": "1234567890",  
        "PaymentTypeCategory": "All",  
        "ToDate": "2016-01-03T06:59:59.000-07:00",  
        "TransactionStatusCol": [  
            "All"  
        ]  
    }  
}
```

Example Response:

```
{  
    "DailyTransactionSummaryCol": [  
        {  
            "DailyTransactionSummaryCollection": [  
                {  
                    "NoOfTransactions": 8,  
                    "TotalAmount": 63.25,  
                    "TransactionSummaryCategory": "DailyTransactions"  
                },  
                {  
                    "PostedDate": "/Date(1451635200000-0800)"/  
                },  
                {  
                    "DailyTransactionSummaryCollection": [  
                        {  
                            "NoOfTransactions": 7,  
                            "TotalAmount": 53.25,  
                            "TransactionSummaryCategory": "DailyTransactions"  
                        },  
                        {  
                            "PostedDate": "/Date(1451721600000-0800)"/  
                        },  
                        {  
                            "DailyTransactionSummaryCollection": [  
                                {  
                                    "NoOfTransactions": 7,  
                                    "TotalAmount": 53.25,  
                                    "TransactionSummaryCategory": "DailyTransactions"  
                                },  
                                {  
                                    "PostedDate": "/Date(1451808000000-0800)"/  
                                }  
                            ]  
                        }  
                    ]  
                }  
            ]  
        }  
    ]  
}
```



```
}
```

```
],
```

```
"RecordCount": 3}
```

DO NOT COPY



8.8 Get Decline Response Code Summary

This method returns a summary of declined transactions by response code for a single merchant/group. All element paths in this method are prefaced by `GetDeclineResponseCodeSummary`. For example, `GetDeclineResponseCodeSummary.Credential.MerchantInfo.MerchantID..`

Element	Type	Description	M/C
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• – Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
SummarySearchCriteria.FromDate	DateTime	This is the start date of the report. Note: <ul style="list-style-type: none">• The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.• When reporting for ACH, the time zone must be set to 0:00. EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.	M
SummarySearchCriteria.GroupID	ans..15	15 digit Group ID Conditions: <ul style="list-style-type: none">• MerchantID or GroupID must be present in the request.	C
SummarySearchCriteria.InputSource	Enumeration	This is the input type where the request is initiated. Valid Values: <ul style="list-style-type: none">• All• Post• Hosted• WebService• Batch• VirtualTerminal	M



SummarySearchCriteria.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• – Conditions: <ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. Note: A special character cannot be the first character in this field.	C
SummarySearchCriteria.PaymentType	Enumeration	This indicates the type of payment. Valid Values: <ul style="list-style-type: none">• All• AllCreditCard• AllACH• CreditCard• DebitCard• PurchaseCard• ACHChecking• ACHSavings• ACHGL (Reserved for future use)	M
SummarySearchCriteria.ToDate	DateTime	This is the end date of the report. Note: <ul style="list-style-type: none">• ToDate cannot be set to a current date or future date.• The report can be queried for a maximum 62 days at a time.• When reporting for ACH, the time zone must be set to 0:00. EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. -07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.	M

Example Request:

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
  },
```



```
},  
"SummarySearchCriteria": {  
    "FromDate": "2016-01-01T06:59:59.000-07:00",  
  
    "InputSource": "VirtualTerminal",  
    "MerchantID": "1234567890",  
    "PaymentType": "All",  
    "ToDate": "2016-01-30T06:59:59.000-07:00"  
}  
}
```

DO NOT COPY

***Example Response:***

```
{  
    "MerchantGroupDeclineResponseCodeSummary": [ {  
        "DataRecordDeclineResponseCodeSummary": [ [  
            {  
                "AmountDeclined": 0.02,  
                "CardType": "AmericanExpress",  
                "CountDeclined": 2,  
                "DeclinedResponseCode": "01",  
                "ResponseCodeDesc": "Refer to card issuer"  
            },  
            {  
                "AmountDeclined": 8.12,  
                "CardType": "VISA",  
                "CountDeclined": 29,  
                "DeclinedResponseCode": "06",  
                "ResponseCodeDesc": "Error"  
            },  
            {  
                "AmountDeclined": 580,  
                "CardType": "VISA",  
                "CountDeclined": 58,  
                "DeclinedResponseCode": "30",  
                "ResponseCodeDesc": "Format error"  
            }  
        ],  
        "MerchantID": "1234567890",  
        "MerchantName": "Barnes & Noble White"  
    }],  
    "RecordCount": 3  
}
```



8.9 Get Decline Summary

This method returns a summary of transactions declined for a single merchant/group. The report can be queried for a maximum 62 days at a time. All element paths in this method are prefaced by GetDeclineSummary. For example, GetDeclineSummary.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C
Credential.MerchantInfo.MerchantID	ans..15	<p>15-Digit Merchant Gateway ID Valid Special Characters:</p> <ul style="list-style-type: none">• – <p>Note: A special character cannot be the first character in this field.</p>	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
SummarySearchCriteria.FromDate	DateTime	<p>This is the start date of the report. Note:</p> <ul style="list-style-type: none">• The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.• When reporting for ACH, the time zone must be set to 0:00. <p>EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.</p>	M
SummarySearchCriteria.GroupID	ans..15	<p>15 digit GroupID Conditions:</p> <ul style="list-style-type: none">• MerchantID or GroupID is required to be present in the request.	C
SummarySearchCriteria.InputSource	Enumeration	<p>This is the input type where the request is initiated. Valid Values:</p> <ul style="list-style-type: none">• All• Post• Hosted• WebService• Batch• VirtualTerminal	M



SummarySearchCriteria.MerchantID	ans..15	<p>15-Digit Merchant Gateway ID</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> - <p>Conditions:</p> <ul style="list-style-type: none"> You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C
SummarySearchCriteria.PaymentType	Enumeration	<p>This indicates the type of payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> All AllCreditCard AllACH CreditCard DebitCard PurchaseCard ACHChecking ACHSavings ACHGL (Reserved for future use) 	M
SummarySearchCriteria.ToDate	DateTime	<p>This is the end date of the report.</p> <p>Note:</p> <ul style="list-style-type: none"> ToDate cannot be set to a current date or future date.. The report can be queried for a maximum 62 days at a time. When reporting for ACH, the time zone must be set to 0:00. <p>EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. -07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.</p>	M

Example Request:

```
{
  "Credential": {
    "MerchantInfo": {
      "MerchantID": "1234567890",
      "RegistrationKey": "MNLPYTT6EDP9HP7H",
    },
  },
  "SummarySearchCriteria": {
```



```
"FromDate": "2016-01-01T06:59:59.000-07:00",
"InputSource": "VirtualTerminal",
"MerchantID": "1234567890",
"PaymentType": "All",
"ToDate": "2016-01-30T06:59:59.000-07:00"
}
}
```

DO NOT COPY



Example Response:

```
{  
    "MerchantGroupDeclineSummary": [ {  
        "DataRecordDeclineSummary": [ [  
            {  
                "AmountHardDecline": 588.12,  
                "AmountSoftDecline": 0,  
                "CardType": "VISA",  
                "CountHardDecline": 87,  
                "CountSoftDecline": 0  
            },  
            {  
                "AmountHardDecline": 0.02,  
                "AmountSoftDecline": 0,  
                "CardType": "AmericanExpress",  
                "CountHardDecline": 2,  
                "CountSoftDecline": 0  
            }  
        ],  
        "MerchantID": "1234567890",  
        "MerchantName": "Barnes & Noble White"  
    }],  
    "RecordCount": 2  
}
```

DO NOT COPY



8.10 Get Expired Cards

This method returns a list of all the expired cards used in setting up recurring profiles by the merchant. All element paths in this method are prefaced by GetExpiredCards. For example, GetExpiredCards.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C/O
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: • – Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
ExpiredCardsSearchCriteria.BeginExpirationDate.MM	n2	Identifies the start expiration month (00-12) of the report query. The Begin Expiration date can be up to 13 months prior to current date.	M
ExpiredCardsSearchCriteria.BeginExpirationDate.YY	n2	Identifies the start expiration year (00-99) of the report query. The Begin Expiration date can be up to 13 months prior to current date.	M
ExpiredCardsSearchCriteria.EndExpirationDate.MM	n2	Identifies the end expiration month (00-12) of the report query. The End Expiration date can be up to 3 months from current date.	M
ExpiredCardsSearchCriteria.EndExpirationDate.YY	n2	Identifies the start expiration Year (00-12) of the report query. The End Expiration date can be up to 3 months from current date.	M
ExpiredCardsSearchCriteria.GroupID	ans..15	15 digit GroupID Conditions: • MerchantID or GroupID is required to be present in the request.	C



ExpiredCardsSearchCriteria.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• – Conditions: <ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. Note: A special character cannot be the first character in this field.	C
PageRequest.PageCount	n..7	Displays the page start index	M
PageRequest.PageSize	n..1000	Displays the number of records displayed on the page	M

Example Request:

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
    },  
  "ExpiredCardsSearchCriteria": {  
    "BeginExpirationDate": {  
      "MM": "09",  
      "YY": "15"  
    },  
    "EndExpirationDate": {  
      "MM": "09",  
      "YY": "16"  
    },  
    "MerchantID": "9001"  
  },  
  "PageRequest": {  
    "PageCount": 1,  
    "PageSize": 1000  
  }  
}
```

Example Response:

```
{  
  "DataRecordExpiredCards": [
```



```
{  
    "AccountAddress": "12202 Airport Way Suite 100",  
    "AccountCity": "Broomfield",  
    "AccountName": "",  
    "AccountZipCode": "80021",  
    "CustomerReferenceID": "Visa Daily Recurring",  
    "ExpirationDate": {  
        "MM": "12",  
        "YY": "15"  
    },  
    "MaskedPAN": "411111*****1111",  
    "MerchantID": "1234567890",  
    "RecurringProfileID": "1354121575823181754",  
    "WalletID": 1354121559271135486  
},  
    {  
        "AccountAddress": "12202 Airport Way Suite 100",  
        "AccountCity": "Broomfield",  
        "AccountName": "",  
        "AccountZipCode": "80021",  
        "CustomerReferenceID": "Visa Daily Recurring",  
        "ExpirationDate": {  
            "MM": "12",  
            "YY": "15"  
        },  
        "MaskedPAN": "411111*****1111",  
        "MerchantID": "1234567890",  
        "RecurringProfileID": "1354121584715191219",  
        "WalletID": 1354121559770168129  
},  
    {  
        "AccountAddress": "12202 Airport Way Suite 100",  
        "AccountCity": "Broomfield",  
        "AccountName": "",  
        "AccountZipCode": "80021",  
        "CustomerReferenceID": "Visa Daily Recurring",  
        "ExpirationDate": {  
            "MM": "12",  
            "YY": "15"  
        },  
        "MaskedPAN": "411111*****1111",  
        "MerchantID": "1234567890",  
        "RecurringProfileID": "1354121594044180712",  
        "WalletID": 1354121560238126947  
},  
    {
```



```
"AccountAddress": "12202 Airport Way Suite 100",
"AccountCity": "Broomfield",
"AccountName": "",
"AccountZipCode": "80021",
"CustomerReferenceID": "Visa Daily Recurring",
"ExpirationDate": {
    "MM": "12",
    "YY": "15"
},
"MaskedPAN": "411111*****1111",
"MerchantID": "1234567890",
"RecurringProfileID": "1355961657405145713",
"WalletID": 1355961283570112149
},
],
"RecordCount": 4
}
```

DO NOT COPY



8.11 Get Recurring Problem Profiles

This method returns a list of all the recurring profiles containing transactions declined for a merchant. All element paths in this method are prefaced by `GetRecurringProblemProfiles`. For example, `GetRecurringProblemProfiles.Credential.MerchantInfo.MerchantID`.

Element	Type	Description	M/C/O
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• _ Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
PageRequest.PageCount	n..7	Displays the page start index	O
PageRequest.PageSize	n..1000	Displays the number of records on the page	O
RecurringProblemProfileSearchCriteria.FromDate	DateTime	This is the start date of the report. Note: <ul style="list-style-type: none">• The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.• When reporting for ACH, the time zone must be set to 0:00. EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.	
RecurringProblemProfileSearchCriteria.GroupID	ans..15	15 digit GroupID Conditions: <ul style="list-style-type: none">• MerchantID or GroupID is required to be present in the request.	C



RecurringProblemProfileSearchCriteria.MerchantID	ans..15	<p>15-Digit Merchant Gateway I</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">– <p>Conditions:</p> <ul style="list-style-type: none">You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C
RecurringProblemProfileSearchCriteria.PaymentTypeCol.PaymentTypeEnum	Enumeration	<p>This indicates the type of payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">AllAllCreditCardAllACHCreditCardDebitCardPurchaseCardACHCheckingACHSavingsACHGL (Reserved for future use) <p>Note: When a field is defined as Col a collection/multiple valid values can be queried within a single request.</p>	M
RecurringProblemProfileSearchCriteria.RecurringStatusCol.RecurringStatusEnum	Enumeration	<p>This field specifies the recurring profile status.</p> <p>Valid Values:</p> <ul style="list-style-type: none">AllInactiveActiveExpired <p>Note: When a field is defined as Col a collection/multiple valid values can be queried within a single request.</p>	M
RecurringProblemProfileSearchCriteria.SortCriteriaRecurringProblemProfile.AscDecFlag	Enumeration	<p>This field specifies the sort order.</p> <p>Valid Values:</p> <ul style="list-style-type: none">AscendingDescending	O
RecurringProblemProfileSearchCriteria.SortCriteriaRecurringProblemProfile.SortColumnRecurringProblemProfile	Enumeration	<p>This is the primary sort order of your results.</p> <p>Valid Values:</p> <ul style="list-style-type: none">RecurringProfileIDDateEnteredMerchantID	M



RecurringProblemSearchCriteria.ToDate	DateTime	<p>This is the end date of the report.</p> <p>Note:</p> <ul style="list-style-type: none">• ToDate must not exceed Today's date therefore future dates cannot be queried.• When reporting for ACH, the time zone must be set to 0:00. <p>EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.</p>	M
---------------------------------------	----------	--	---

***Example Request:***

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
    "PageRequest": {  
      "PageCount": 1,  
      "PageSize": 1000  
    },  
    "RecurringProblemProfileSearchCriteria": {  
      "FromDate": "2016-01-01T06:59:59.000-07:00",  
      "MerchantID": "1234567890",  
      "PaymentTypeCol": [  
        "All"  
      ],  
      "RecurringStatusCol": [  
        "All"  
      ],  
      "SortCriteriaRecurringProblemProfile": {  
        "AscDescFlag": "Ascending",  
        "SortColumnRecurringProblemProfile": "RecurringProfileID"  
      },  
      "ToDate": "2016-01-31T06:59:59.000-07:00"  
    }  
}
```

Example Response:

```
{  
  "DataRecordRecurringProfiles": [  
    {  
      "AccountName": "John Smith",  
      "BankAccountNum": "",  
      "BankRoutingNum": "",  
      "CustomerReferenceID": "Recurr CustRefID",  
      "DateEntered": "/Date(1427983632223-0700)/",  
      "ExpirationDate": {  
        "MM": "12",  
        "YY": "19"  
      },  
      "MaskedPAN": "407714*****0938",  
      "MerchantID": "1234567890",  
      "NextProcessDate": "/Date(1473836400000-0700)/",  
    }  
  ]  
}
```



```
"NumDeclinedPayments": 30,  
"NumPaymentsProcessed": 531,  
"PaymentType": "CreditCard",  
"ProfileAmount": 0.28,  
"RecurringProfileID": "1427983631907116337",  
"RecurringStatus": "Active"  
},  
{  
"AccountName": "John Smith",  
"BankAccountNum": "*****3123",  
"BankRoutingNum": "123456780",  
"CustomerReferenceID": "",  
"DateEntered": "/Date(1439590130293-0700)/",  
"ExpirationDate": {},  
"MaskedPAN": "",  
"MerchantID": "1234567890",  
"NextProcessDate": "/Date(1473836400000-0700)/",  
"NumDeclinedPayments": 3,  
"NumPaymentsProceessed": 397,  
"PaymentType": "ACHChecking",  
"ProfileAmount": 1.25,  
"RecurringProfileID": "1439590130031151121",  
"RecurringStatus": "Active"  
},  
{  
"AccountName": "John Smith",  
"BankAccountNum": "*****7766",  
"BankRoutingNum": "123456789",  
"CustomerReferenceID": "MerclInfo, fullName, Max Input, ACH",  
"DateEntered": "/Date(1452715674543-0800)/",  
"ExpirationDate": {},  
"MaskedPAN": "",  
"MerchantID": "1234567890",  
"NextProcessDate": "/Date(1453622400000-0800)/",  
"NumDeclinedPayments": 10,  
"NumPaymentsProceessed": 11,  
"PaymentNum": 11,  
"PaymentType": "ACHChecking",  
"ProfileAmount": 19.83,  
"RecurringProfileID": "1452715674703175250",  
"RecurringStatus": "Expired"  
},  
{  
"AccountName": "John Smith",  
"BankAccountNum": "*****7766",  
"BankRoutingNum": "123456789",
```



```
"CustomerReferenceID": "UserInfo, fullName, Max Input, ACH",
    "DateEntered": "/Date(1452715675293-0800)/",
    "ExpirationDate": {},
    "MaskedPAN": "",
    "MerchantID": "1234567890",
    "NextProcessDate": "/Date(1452758400000-0800)/",
    "NumDeclinedPayments": 1,
    "NumPaymentsProceessed": 1,
    "PaymentNum": 1,
    "PaymentType": "ACHChecking",
    "ProfileAmount": 19.83,
    "RecurringProfileID": "1452715675452145844",
    "RecurringStatus": "Expired"
},
{
    "AccountName": "John Smith",
    "BankAccountNum": "*****7766",
    "BankRoutingNum": "123456789",
    "CustomerReferenceID": "UserInfo, fullName, Max Input, ACH",
    "DateEntered": "/Date(1452715675510-0800)/",
    "ExpirationDate": {},
    "MaskedPAN": "",
    "MerchantID": "1234567890",
    "NextProcessDate": "/Date(1453536000000-0800)/",
    "NumDeclinedPayments": 9,
    "NumPaymentsProceessed": 10,
    "PaymentNum": 10,
    "PaymentType": "ACHChecking",
    "ProfileAmount": 19.83,
    "RecurringProfileID": "1452715675671103705",
    "RecurringStatus": "Expired"
},
{
    "AccountName": "John Smith",
    "BankAccountNum": "*****7766",
    "BankRoutingNum": "123456789",
    "CustomerReferenceID": "UserInfo, fullName, Max Input, ACH",
    "DateEntered": "/Date(1452716620790-0800)/",
    "ExpirationDate": {},
    "MaskedPAN": "",
    "MerchantID": "1234567890",
    "NextProcessDate": "/Date(1452754800000-0800)/",
    "NumDeclinedPayments": 1,
    "NumPaymentsProceessed": 1,
    "PaymentNum": 1,
    "PaymentType": "ACHChecking",
```



```
"ProfileAmount": 19.83,  
"RecurringProfileID": "1452716620948194244",  
"RecurringStatus": "Expired"  
}  
],  
"RecordCount": 6  
}
```

DO NOT COPY



8.12 Get Recurring Profiles

This method returns all the recurring profiles setup by a merchant. The results can be narrowed down by using several filters. All element paths in this method are prefaced by `GetRecurringProfiles`. For example,
`GetRecurringProfiles.Credential.MerchantInfo.MerchantID`.

Element	Type	Description	M/C/O
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• _ <p>Note: A special character cannot be the first character in this field.</p>	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
PageRequest.PageCount	n..7	Displays the page start index	M
PageRequest.PageSize	n..1000	Displays the number of records displayed on the page	M
RecurringProfileSearchCriteria.AccountName	ans..61	Cardholder's full name.	O
RecurringProfileSearchCriteria.CustomerReferenceID	ans..50	User Defined Reference Value Valid Special Characters: <ul style="list-style-type: none">• _ <p>Note: A special character cannot be the first character.</p>	O
RecurringProfileSearchCriteria.GroupID	ans..15	15 digit GroupID Conditions: <ul style="list-style-type: none">• MerchantID or GroupID must be present in the request.	C
RecurringProfileSearchCriteria.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• _ <p>Conditions:<ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data.<p>Note: A special character cannot be the first character in this field.</p></p>	C



RecurringProfileSearchCriteria.PaymentTypeCol.PaymentTypeEnum	Enumeration	This indicates the type of payment. Valid Values: <ul style="list-style-type: none">• All• AllCreditCard• AllACH• CreditCard• DebitCard• PurchaseCard• ACHChecking• ACHSavings• ACHGL (Reserved for future use) Note: When a field is defined as Col a collection/multiple valid values can be queried within a single request.	M
RecurringProfileSearchCriteria.RecurringStatuscol.RecurringStatusEnum	Enumeration	This field allows you to specify the status of the recurring profile. Valid Values: <ul style="list-style-type: none">• All• Inactive• Active• Expired Note: When a field is defined as Col a collection/multiple valid values can be queried within a single request.	M
RecurringProfileSearchCriteria.SortCriteria RecurringProfile.AscDescFlag	Enumeration	This field specifies the sort order. Valid Values: <ul style="list-style-type: none">• Ascending• Descending Note: This field will default to Ascending.	O
SortCriteriaRecurringProfile. SortColumnNumRecurringProfile	Enumeration	This is the primary sort order for your results. Valid Values: <ul style="list-style-type: none">• RecurringProfileID• CustomerReferenceID• DateEntered• AccountName• NextProcessDate• MerchantID	M

***Example Request:***

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
    },  
  "PageRequest": {  
    "PageCount": 1,  
    "PageSize": 1000  
  },  
  "RecurringProfileSearchCriteria": {  
    "CustomerReferenceID": "PatientPortalPayments",  
    "MerchantID": "1234567890",  
    "PaymentTypeCol": [  
      "All"  
    ],  
    "RecurringStatusCol": [  
      "All"  
    ],  
    "SortCriteriaRecurringProfile": {  
      "AscDescFlag": "Ascending",  
      "SortColumnNumRecurringProfile": "RecurringProfileID"  
    }  
  }  
}
```

Example Response:

```
{  
  "DataRecordRecurringProfiles": [  
    {  
      "AccountName": "John Smith",  
      "BankAccountNum": "",  
      "BankRoutingNum": "",  
      "CustomerReferenceID": "Credit Card Wallet",  
      "DateEntered": "/Date(1354063924607-0800)/",  
      "ExpirationDate": {  
        "MM": "06",  
        "YY": "15"  
      },  
      "MaskedPAN": "549974*****0057",  
      "MerchantID": "1234567890",  
      "NextProcessDate": "/Date(1385798400000-0800)/",  
      "NumPaymentsProceessed": 12,  
    }  
  ]  
}
```



```
"PaymentNum": 12,  
"PaymentType": "CreditCard",  
"ProfileAmount": 10,  
"RecurringProfileID": "1354060324241146338",  
"RecurringStatus": "Expired"  
},  
{  
    "AccountName": "",  
    "BankAccountNum": "",  
    "BankRoutingNum": "",  
    "CustomerReferenceID": "Visa Daily Recurring",  
    "DateEntered": "/Date(1354125193637-0800)/",  
    "ExpirationDate": {  
        "MM": "12",  
        "YY": "15"  
    },  
    "MaskedPAN": "411111*****1111",  
    "MerchantID": "1234567890",  
    "NextProcessDate": "/Date(1475305200000-0700)/",  
    "NumPaymentsProceessed": 47,  
    "PaymentType": "CreditCard",  
    "ProfileAmount": 10,  
    "RecurringProfileID": "1354121594044180712",  
    "RecurringStatus": "Active"  
},  
{  
    "AccountName": "",  
    "BankAccountNum": "",  
    "BankRoutingNum": "",  
    "CustomerReferenceID": "Visa Daily Recurring",  
    "DateEntered": "/Date(1355961629193-0800)/",  
    "ExpirationDate": {  
        "MM": "12",  
        "YY": "15"  
    },  
    "MaskedPAN": "411111*****1111",  
    "MerchantID": "1234567890",  
    "NextProcessDate": "/Date(1473836400000-0700)/",  
    "NumPaymentsProceessed": 1365,  
    "PaymentType": "CreditCard",  
    "ProfileAmount": 10,  
    "RecurringProfileID": "1355961657405145713",  
    "RecurringStatus": "Active"  
}  
],  
"RecordCount": 110
```



}

DO NOT COPY



8.13 Get Settle by Date

This method returns a summary of Approved/Authorized unsettled transactions within 62 days for single merchant/group. All element paths in this method are prefaced by GetSettleByDate. For example, GetSettleByDate.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• – Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
SettleByDateSearchCriteria.GroupID	ans..15	15 digit GroupID Conditions: <ul style="list-style-type: none">• MerchantID or GroupID is required to be present in the request.	C
SettleByDateSearchCriteria.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• – Conditions: <ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. Note: A special character cannot be the first character in this field.	C

***Example Request:***

```
{  
    "Credential": {  
        "MerchantInfo": {  
            "MerchantID": "1234567890",  
            "RegistrationKey": "MNLPYTT6EDP9HP7H",  
        },  
    },  
    "SettleByDateSearchCriteria": {  
        "MerchantID": "1234567890"  
    }  
}
```

Example Response:

```
{  
    "DataRecordSettleByDate": [ {  
        "MerchantID": "1234567890",  
        "NumTransactions": 1,  
        "PostedDate": "/Date(1468998000000-0700)/",  
        "TotalAmount": 18.17  
    }],  
    "RecordCount": 1  
}
```



8.14 Get Settlement Summary

This method returns a summary of settled transactions grouped by date. The results can be narrowed down using search filters. Note: Refund/Credit Amounts lead with a “-“ symbol.

Element	Type	Description	M/C
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• - Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
SummarySearchCriteria.FromDate	DateTime	This is the start date of the report. Note: <ul style="list-style-type: none">• The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.• When reporting for ACH, the time zone must be set to 0:00. EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.	M
SummarySearchCriteria.GroupID	ans..15	15 digit GroupID Conditions: <ul style="list-style-type: none">• MerchantID or GroupID must be present in the request.	C
SummarySearchCriteria.InputSource	Enumeration	This is the input type where the request is initiated. Valid Values: <ul style="list-style-type: none">• All• Post• Hosted• WebService• Batch• VirtualTerminal	M



SummarySearchCriteria.MerchantID	ans..15	<p>15-Digit Merchant Gateway ID</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> - <p>Conditions:</p> <ul style="list-style-type: none"> You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C
SummarySearchCriteria.PaymentType	Enumeration	<p>This indicates the type of payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> All AllACH AllCreditCard CreditCard DebitCard PurchaseCard ACHChecking ACHSavings ACHGL (Reserved for future use) 	M
SummarySearchCriteria.ToDate	DateTime	<p>This is the end date of the report.</p> <p>Note:</p> <ul style="list-style-type: none"> ToDate cannot be set to a current date or future date. When reporting for ACH, the time zone must be set to 0:00. <p>EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. -07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.</p>	M

Example Request:

```
{
  "Credential": {
    "MerchantInfo": {
      "MerchantID": "1234567890",
      "RegistrationKey": "MNLPYTT6EDP9HP7H",
    },
  },
  "SummarySearchCriteria": {
}
```



```
"FromDate": "2016-04-18T00:00:00.000-07:00",
"InputSource": "All",
"MerchantID": "1234567890",
"PaymentType": "All",
"ToDate": "2016-04-19T23:59:59.000-07:00",
}
}
```

DO NOT COPY



Example Response:

```
{  
    "MerchantGroupSettlementSummary": [ {  
        "DataRecordSettlementSummary": [ [  
            {  
                "AmountRefunded": 0,  
                "AmountSettled": 37.51,  
                "CardType": "VISA",  
                "CountRefunded": 0,  
                "CountSettled": 4  
            },  
            {  
                "AmountRefunded": 0,  
                "AmountSettled": 14.33,  
                "CardType": "Mastercard",  
                "CountRefunded": 0,  
                "CountSettled": 1  
            },  
            {  
                "AmountRefunded": 0,  
                "AmountSettled": 4.62,  
                "CardType": "AmericanExpress",  
                "CountRefunded": 0,  
                "CountSettled": 4  
            }  
        ],  
        "MerchantID": "1234567890",  
        "MerchantName": "TEST INTEGRATIONS ACCT"  
    }],  
    "RecordCount": 3  
}
```



8.15 Get Summary Transactions

This method returns a summary of transactions by date. The merchant has the ability to select the type of summary to be returned along with the ability to narrow down the results with various filters. Note: Refund/Credit Amounts lead with a “-“ symbol. All element paths in this method are prefaced by GetSummaryTransactions. For example, GetSummaryTransactions.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C/O
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">•- Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
PageRequest.PageCount	n..7	Displays the page start index	M
PageRequest.PageSize	n..1000	Displays the number of records be displayed on the page	M
SummaryTransactionsSearchCriteria.AccountType	Enumeration	This indicates the credit card type. Valid Values: <ul style="list-style-type: none">• All• Visa• MasterCard• AmericanExpress• Discover• JCB• PayPal	O



SummaryTransactionsSearchCriteria.FromDate	DateTime	<p>This is the start date of the report.</p> <p>Note:</p> <ul style="list-style-type: none">The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.When reporting for ACH, the time zone must be set to 0:00. <p>EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. -07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.</p>	M
SummaryTransactionsSearchCriteria.GroupID	ans..15	<p>15 digit GroupID</p> <p>Conditions:</p> <ul style="list-style-type: none">MerchantID or GroupID must be present in the request.	C
SummaryTransactionsSearchCriteria.InputSource	Enumeration	<p>This is the input type where the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">AllPostHostedWebServiceBatchVirtualTerminal	M
SummaryTransactionsSearchCriteria.MerchantID	ans..15	<p>15-Digit Merchant Gateway ID</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">- <p>Conditions:</p> <ul style="list-style-type: none">You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C



SummaryTransactionsSearchCriteria.PaymentType	Enumeration	This indicates the type of payment. Valid Values: <ul style="list-style-type: none">• All• AllCreditCard• CreditCard• DebitCard• PurchaseCard	M
SummaryTransactionsSearchCriteria.ReportType	Enumeration	This specifies the type of report you want to query. Valid Values: <ul style="list-style-type: none">• AuthorizationSummary• SettlementSummary• DeclineSummary• DeclineResponseCodeSummary• VerificationDeclineCodeSummary	M
SummaryTransactionsSearchCriteria.ResponseCode	an..3	This is the Response Code the transaction receives. Valid Values: Please refer to the Transaction Response Codes table.	O
SummaryTransactionsSearchCriteria.ToDate	DateTime	This is the end date of the report. Note: <ul style="list-style-type: none">• ToDate cannot be set to a current date or future date.• When reporting for ACH, the time zone must be set to 0:00. EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. -07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.	M
SummaryTransactionsSearchCriteria.TransType	Enumeration	This is the type of transaction processed. Valid Values: <ul style="list-style-type: none">• All• Authorization• Reauthorization• PartialAuthorizationReversal• FullAuthorizationReversal• AccountVerification	O

Example Request:

{



```
"Credential": {  
    "MerchantInfo": {  
        "MerchantID": "1234567890",  
        "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
},  
"PageRequest": {  
    "PageCount": 1,  
    "PageSize": 1000  
},  
"SummaryTransactionsSearchCriteria": {  
    "AccountType": "All",  
    "FromDate": "2016-01-01T06:59:59.000-07:00",  
    "InputSource": "VirtualTerminal",  
    "MerchantID": "1234567890",  
    "PaymentType": "All",  
    "ReportType": "AuthorizationSummary",  
    "ToDate": "2016-01-02T03:59:59.000-07:00",  
    "TransType": "All"  
}  
}
```

DO NOT COPY

***Example Response:***

```
{  
  "DataRecordTransactionDetails": [  
    {  
      "ACHReturnCode": "",  
      "AccHolderNumber": "374327*****7365",  
      "ApprovedAuthAmount": 1.3,  
      "AuthAmount": 1.3,  
      "AuthorizationCode": "AXS547",  
      "CardHolderName": "YOU/A GIFT FOR",  
      "CardType": "AmericanExpress",  
      "CustomerReferenceID": "JD Test AMEX 72575",  
      "DeviceID": "",  
      "ExpirationDate": {  
        "MM": "02",  
        "YY": "21"  
      },  
      "MerchantDBAName": "Barnes & Noble White",  
      "MerchantID": "1234567890",  
      "Notes": "Approved or completed successfully",  
      "OriginalSettleAmount": 1.3,  
      "PaymentType": "CreditCard",  
      "PostedDate": "/Date(1451723162507-0800)/",  
      "ReSubmitted": false,  
      "RecurringProfileId": 1446831730094133203,  
      "RequestedAmount": 1.3,  
      "RequestedSettleAmount": 1.3,  
      "RoutingNumber": "",  
      "SalesType": "Sale",  
      "SettleDate": "/Date(1451807940000-0800)/",  
      "TransactionStatus": "Settled",  
      "TransactionType": "AuthorizationAndSettle",  
      "TransactionTypeIndicator": "2",  
      "UserName": "RPE",  
      "WalletId": 1446830693512199677,  
      "isPartialAuthorization": false,  
      "tranNr": 11736461  
    },  
    {  
      "ACHReturnCode": "",  
      "AccHolderNumber": "407714*****0938",  
      "AuthAmount": 0.28,  
      "AuthorizationCode": "",  
      "CardHolderName": "John Smith",  
      "CardType": "VISA",  
      "CustomerReferenceID": "Recurr CustRefID",  
      "DeviceID": "",  
      "ExpirationDate": {  
        "MM": "02",  
        "YY": "21"  
      },  
      "MerchantDBAName": "Barnes & Noble White",  
      "MerchantID": "1234567890",  
      "Notes": "Approved or completed successfully",  
      "OriginalSettleAmount": 0.28,  
      "PaymentType": "CreditCard",  
      "PostedDate": "/Date(1451723162507-0800)/",  
      "ReSubmitted": false,  
      "RecurringProfileId": 1446831730094133203,  
      "RequestedAmount": 0.28,  
      "RequestedSettleAmount": 0.28,  
      "RoutingNumber": "",  
      "SalesType": "Sale",  
      "SettleDate": "/Date(1451807940000-0800)/",  
      "TransactionStatus": "Settled",  
      "TransactionType": "AuthorizationAndSettle",  
      "TransactionTypeIndicator": "2",  
      "UserName": "RPE",  
      "WalletId": 1446830693512199677,  
      "isPartialAuthorization": false,  
      "tranNr": 11736461  
    }  
  ]  
}
```



```
"DeviceID": "",  
"ExpirationDate": {  
    "MM": "12",  
    "YY": "19"  
},  
"MerchantDBName": "Barnes & Noble White",  
"MerchantID": "1234567890",  
"Notes": "Error",  
"PaymentType": "CreditCard",  
"PostedDate": "/Date(1451723157607-0800)/",  
"ReSubmitted": false,  
"RecurringProfileId": 1427983631907116337,  
"RequestedAmount": 0.28,  
"RoutingNumber": "",  
"SalesType": "Sale",  
"TransactionStatus": "Declined",  
"TransactionType": "AuthorizationAndSettle",  
"TransactionTypeIndicator": "2",  
"UserName": "RPE",  
"WalletId": 1427983631439163885,  
"isPartialAuthorization": false,  
"tranNr": 11734501  
},  
{  
    "ACHReturnCode": "",  
    "AccHolderNumber": "411111*****1111",  
    "AuthAmount": 10,  
    "AuthorizationCode": "",  
    "CardHolderName": "",  
    "CardType": "VISA",  
    "CustomerReferenceID": "",  
    "DeviceID": "",  
    "ExpirationDate": {  
        "MM": "12",  
        "YY": "15"  
    },  
    "MerchantDBName": "Barnes & Noble White",  
    "MerchantID": "1234567890",  
    "Notes": "Format error",  
    "PaymentType": "CreditCard",  
    "PostedDate": "/Date(1451723157583-0800)/",  
    "ReSubmitted": false,  
    "RequestedAmount": 10,  
    "RoutingNumber": "",  
    "SalesType": "Sale",  
    "TransactionStatus": "Declined",
```



```
"TransactionType": "AuthorizationAndSettle",
"TransactionTypeIndicator": "2",
"UserName": "RPE",
"isPartialAuthorization": false,
"tranNr": 11734451
},
{
"ACHReturnCode": "",
"AccHolderNumber": "411111*****1111",
"AuthAmount": 10,
"AuthorizationCode": "",
"CardHolderName": "",
"CardType": "VISA",
"CustomerReferenceID": "",
"DeviceID": "",
"ExpirationDate": {
"MM": "12",
"YY": "15"
},
"MerchantDBAName": "Barnes & Noble White",
"MerchantID": "1234567890",
"Notes": "Format error",
"PaymentType": "CreditCard",
"PostedDate": "/Date(1451723157580-0800)/",
"ReSubmitted": false,
"RequestedAmount": 10,
"RoutingNumber": "",
"SalesType": "Sale",
"TransactionStatus": "Declined",
"TransactionType": "AuthorizationAndSettle",
"TransactionTypeIndicator": "2",
"UserName": "RPE",
"isPartialAuthorization": false,
"tranNr": 11734441
}
],
"RecordCount": 4
}
```



8.16 Get Transaction Details

This method returns a list of transactions for a merchant/group based on the filter criteria. Note: Refund/Credit Amounts lead with a “-” symbol.

To retrieve the full set of properties for a specific transaction, the GetTransaction method should be used, as GetTransactionDetails only returns a subset of the full properties.

All element paths in this method are prefaced by GetTransactionDetails. For example, GetTransactionDetails.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C/O
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• - Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
PageRequest.PageCount	n..7	Displays the page start index	M
PageRequest.PageSize	n..1000	Displays the number of records shown on the page	M
TransactionDetailSearchCriteria.AccountHolderNumber	ans..19	The account number. Conditions: <ul style="list-style-type: none">• Maximum field length is 19 when PaymentType is Credit Card, Debit Card, or Purchase Card.• Maximum field length is 17 when PaymentType is ACH.	O
TransactionDetailSearchCriteria.Amount	n..12 and a decimal (.); e.g. 9999999999.99	Transaction Amount (Including decimal point)	O
TransactionDetailSearchCriteria.CardHolderName	ans..61	Cardholder's full name	O



TransactionDetailSearchCriteria.CardType	Enumeration	This indicates the credit card type. Valid Values: <ul style="list-style-type: none">• All• Visa• MasterCard• AmericanExpress• Discover• JCB• PayPal	M
TransactionDetailSearchCriteria.CustomerReferenceID	ans..50	User Defined Reference Value Valid Special Characters: <ul style="list-style-type: none">• _ Note: A special character cannot be the first character.	O
TransactionDetailSearchCriteria.DateType	Enumeration	This is the type of date. Valid Values: <ul style="list-style-type: none">• PostedDate• SettledDate	M
TransactionDetailSearchCriteria.FromDate	DateTime	This is the start date of the report. Note: <ul style="list-style-type: none">• The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.• When reporting for ACH, the time zone must be set to 0:00. Ex:YYYY-MM-DDThh:mm:ss.sss-hh:mm. (-hh:mm) the time zone is required to be passed in Pacific Time.	M
TransactionDetailSearchCriteria.GroupID	ans..15	15 digit GroupID Conditions: <ul style="list-style-type: none">• GroupID or MerchantID must be present in the request.	C



TransactionDetailSearchCriteria. InputSources.InputSourceEnum	Enumeration	<p>This is the input type where the request is initiated.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• All• Hosted• Post• WebService• Batch• VirtualTerminal	M
TransactionDetailSearchCriteria. MerchantID	ans..15	<p>15-Digit Merchant Gateway ID</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• _ <p>Conditions:</p> <ul style="list-style-type: none">• MerchantID or GroupID must be present in the request.• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C
TransactionDetailSearchCriteria. OrderNumber	ans..50	<p>User Defined Order Value</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• _ <p>Note: A special character cannot be the first character.</p>	O
TransactionDetailSearchCriteria. PaymentTypes.PaymentTypeEnum	Enumeration	<p>This indicates the type of payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• All• AllCreditCard• AllACH• CreditCard• DebitCard• PurchaseCard• ACHChecking• ACHSavings• ACHGL (Reserved for future use)	M
TransactionDetailSearchCriteria. RecurringProfileID	n..19	Identifies the recurring ID assigned to the transaction	O



TransactionDetailSearchCriteria.ResponseType	Enumeration	<p>This specifies the response type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• All• Approved• Declined• Processed	M
TransactionDetailSearchCriteria.SalesType	Enumeration	<p>This specifies the type of transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• All• Sale• CreditorRefund	M
TransactionDetailSearchCriteria.SortCriteriaTransactionDetail.AscDecFlag	Enumeration	<p>This field specifies the sort order.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• Ascending• Descending <p>Note: This field will default to Ascending.</p>	O
TransactionDetailSearchCriteria.SortCriteriaTransactionDetail.SortColumnNumTransactionDetail	Enumeration	<p>This is the primary sort order your results are returned in.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• PostedDate• CustomerReferenceID• Amount• tranNr• TransStatus• TransType• MerchantID• AccountHolderNumber	M
TransactionDetailSearchCriteria.ToDate	DateTime	<p>This is the end date of the report.</p> <p>Note:</p> <ul style="list-style-type: none">• ToDate must not exceed Today's date therefore future dates cannot be queried.• When reporting for ACH, the time zone must be set to 0:00. <p>EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.</p>	M



TransactionDetailSearchCriteria. TransactionStatusCol.TransStatusEnum	Enumeration	<p>This field allows you to specify the status of the transaction.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• All• Approved• ApprovedNotSettled• ApprovedMarkedForSettlement• Declined• VoidedOrReversedAuthorization• Settled• Refunded• AllDeclined• AllReturned• Processed• Originated• Funded• Returned• NSF• ChargeBack• Invalid• DeclinedAch• RefundedAch• Credit• Incomplete• Cancelled• BOException• Downloaded• CreditOriginated• CreditDownloaded• CreditReturn• CreditFunded• DeclinedDownloaded• DeclinedResponseCodeMonitoring• SettlementInProgress• FirstRecycle• SecondRecycle• FailedRecycle	M
--	-------------	--	---



TransactionDetailSearchCriteria.TransactionTypeCol.TransTypeEnum	Enumeration	This specifies the type of transaction. Valid Values: <ul style="list-style-type: none">• All• AllCreditCard• AllACH• Authorizations• AuthorizationAndSettle• AuthorizationReversals• ForceVoiceAuth• RefundOrReturn• BlindCredit• Void• AccountVerification• ACHDebit• ACHCredit• SettleTransaction• ACHCancelRefund• ACHPreNote	M
TransactionDetailSearchCriteria.UserID	ans..50	Valid Values: Batch, RPE and in VT, this is the ID of the user who processed the transaction.	O
TransactionDetailSearchCriteria.tranNr	n..19	Unique ID generated when a transaction is processed.	O

Example Request:

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H"  
    },  
    "PageRequest": {  
      "PageCount": 1,  
      "PageSize": 1000  
    },  
    "TransactionDetailSearchCriteria": {  
      "CardType": "All",  
      "DateType": "PostedDate",  
      "FromDate": "2016-04-19T00:00:00.000-07:00",  
      "InputSources": [  
        "All"  
      ],  
      "MerchantID": "1234567890",  
      "PaymentTypes": [  
        "CreditCard"  
      ]  
    }  
  }  
}
```



```
],
  "ResponseType": "All",
  "SalesType": "All",
  "SortCriteriaTransactionDetail": {
    "AscDescFlag": "Ascending",
    "SortColumnNumTransactionDetail": "PostedDate"
  },
  "ToDate": "2016-04-19T00:00:00.000-07:27",
  "TransactionStatusCol": [
    "All"
  ],
  "TransactionTypeCol": [
    "All"
  ],
}
```

Example Response:

```
{
  "DataRecordTransactionDetails": [
    {
      "ACHReturnCode": "",
      "ACHReturnMessage": "",
      "AccHolderNumber": "411111*****1111",
      "AuthAmount": 10,
      "AuthorizationCode": "",
      "CardHolderName": "",
      "CardInputType": 0,
      "CardInputTypeDesc": "Normal (non-EMV magstripe or keyed)",
      "CardType": "VISA",
      "CustomerReferenceID": "",
      "DeviceID": "",
      "ExpirationDate": {
        "MM": "12",
        "YY": "15"
      },
      "MerchantDBAName": "Barnes & Noble White",
      "MerchantID": "1234567890",
      "Notes": "Format error",
      "PaymentType": "CreditCard",
      "PostedDate": "/Date(1461050765367-0700)/",
      "ReSubmitted": false,
      "RequestedAmount": 10,
      "RoutingNumber": "",
      "SalesType": "Sale",
      "TransactionStatus": "Declined",
      "TransactionType": "AuthorizationAndSettle",
    }
  ]
}
```



```
"TransactionTypeIndicator": "2",
"UserName": "RPE",
"isPartialAuthorization": false,
"tranNr": 11121531
},
{
"ACHReturnCode": "",
"ACHReturnMessage": "",
"AccHolderNumber": "411111*****1111",
"AuthAmount": 10,
"AuthorizationCode": "",
"CardHolderName": "",
"CardInputType": 0,
"CardInputTypeDesc": "Normal (non-EMV magstripe or keyed)",
"CardType": "VISA",
"CustomerReferenceID": "",
"DeviceID": "",
"ExpirationDate": {
"MM": "12",
"YY": "15"
},
"MerchantDBAName": "Barnes & Noble White",
"MerchantID": "1234567890",
"Notes": "Duplicate transaction",
"PaymentType": "CreditCard",
"PostedDate": "/Date(1461050765370-0700)/",
"ReSubmitted": false,
"RequestedAmount": 10,
"RoutingNumber": "",
"SalesType": "Sale",
"TerminalId": "00016789",
"TransactionStatus": "Declined",
"TransactionType": "AuthorizationAndSettle",
"TransactionTypeIndicator": "2",
"UserName": "RPE",
"isPartialAuthorization": false,
"tranNr": 11121541
},
{
"ACHReturnCode": "",
"ACHReturnMessage": "",
"AccHolderNumber": "407714*****0938",
"AuthAmount": 0.28,
"AuthorizationCode": "",
"CardHolderName": "John Smith",
"CardInputType": 0,
```



```
"CardInputTypeDesc": "Normal (non-EMV magstripe or keyed)",
"CardType": "VISA",
"CustomerReferenceID": "Recurr CustRefID",
"DeviceID": "",
"ExpirationDate": {
    "MM": "12",
    "YY": "19"
},
"MerchantDBName": "Barnes & Noble White",
"MerchantID": "1234567890",
"Notes": "Error",
"PaymentType": "CreditCard",
"PostedDate": "/Date(1461050765427-0700)/",
"ReSubmitted": false,
"RecurringProfileId": 1427983631907116337,
"RequestedAmount": 0.28,
"RoutingNumber": "",
"SalesType": "Sale",
"TerminalId": "00016789",
"TransactionStatus": "Declined",
"TransactionType": "AuthorizationAndSettle",
"TransactionTypeIndicator": "2",
"UserName": "RPE",
"WalletId": 1427983631439163885,
"isPartialAuthorization": false,
"tranNr": 11121601
},
],
"RecordCount": 3
}
```



8.17 Get Verification Decline Code Summary

This method returns a summary of declined transactions grouped by decline code. All element paths in this method are prefaced by *GetVerificationDeclineCodeSummary*. For example,

GetVerificationDeclineCodeSummary.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• - Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
SummarySearchCriteria.FromDate	DateTime	This is the start date of the report. Note: <ul style="list-style-type: none">• The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.• When reporting for ACH, the time zone must be set to 0:00. EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. - 07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.	M
SummarySearchCriteria.GroupID	ans..15	15 digit GroupID Conditions: <ul style="list-style-type: none">• MerchantID or GroupID is required to be present in the request.	C
SummarySearchCriteria.InputSource	Enumeration	This is the input type where the request is initiated. Valid Values: <ul style="list-style-type: none">• All• Post• Hosted• WebService• Batch• VirtualTerminal	M



SummarySearchCriteria.MerchantID	ans..15	<p>15-Digit Merchant Gateway ID</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">• – <p>Conditions:</p> <ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C
SummarySearchCriteria.PaymentType	Enumeration	<p>This specifies the type of payment.</p> <p>Valid Values:</p> <ul style="list-style-type: none">• All• AllCreditCard• AllACH• CreditCard• DebitCard• PurchaseCard• ACHChecking• ACHSavings• ACHGL (Reserved for future use)	M
SummarySearchCriteria.ToDate	DateTime	<p>This is the end date of the report.</p> <p>Note:</p> <ul style="list-style-type: none">• ToDate cannot be set to a current date or future date.• When reporting for ACH, the time zone must be set to 0:00. <p>EX: YYYY-MM-DDThh:mm:ss.sss-hh:mm. -07:00 indicates Pacific time zone during daylight savings in GMT. The value will always be either -8:00 during winter months and -7:00 during summer months.</p>	M

***Example Request:***

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
    "SummarySearchCriteria": {  
      "FromDate": "2016-01-01T00:00:00.000-07:00",  
      "InputSource": "VirtualTerminal",  
      "MerchantID": "1234567890",  
      "PaymentType": "All",  
      "ToDate": "2016-01-01T06:59:59.000-07:00"  
    }  
  }  
}
```

Example Response:

```
{  
  "MerchantGroupVerificationDeclineCodeSummary": [ {  
    "DataRecordVerificationDeclineCodeSummary": [ [  
      {  
        "AmountDeclined": 10.28,  
        "CardType": "VISA",  
        "CountDeclined": 2,  
        "DeclineResponseCode": "N",  
        "ResponseCodeDesc": "No Match",  
        "ResponseCodeType": "AVS"  
      },  
      {  
        "AmountDeclined": 2.31,  
        "CardType": "AmericanExpress",  
        "CountDeclined": 2,  
        "DeclineResponseCode": "N",  
        "ResponseCodeDesc": "No Match",  
        "ResponseCodeType": "AVS"  
      }  
    ],  
    "MerchantID": "1234567890",  
    "MerchantName": "Barnes & Noble White"  
  ]},  
  "RecordCount": 2  
}
```



8.18 Get Customer LookUp

This method returns a list of transactions for a merchant/group based on the filter criteria. Note: Refund/Credit Amounts lead with a “-“ symbol.

Element	Type	Description	M/C/O
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: — Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
CustomerLookUpSearchCriteria.GroupID	ans..15	15 digit GroupID Conditions: MerchantID or GroupID must be present in the request.	C
CustomerLookUpSearchCriteria.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: — Conditions: You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. Note: A special character cannot be the first character in this field.	C
CustomerLookUpSearchCriteria.SalesType	Enumeration	This specifies the type of transaction. Valid Values: <ul style="list-style-type: none">• All• Sale• CreditorRefund	M
CustomerLookUpSearchCriteria.SearchID	n..19	Identifies the recurring ID assigned to the transaction.	M



CustomerLookUpSearchCriteria.SearchType	Enumeration	This specifies the type of transaction. Valid Values: <ul style="list-style-type: none">• WalletID• RecurringID• CustomerID	O
CustomerLookUpSearchCriteria.SortCriteria CustomerLookUp.AscDescFlag	Enumeration	This field specifies the sort order. Valid Values: Ascending Descending Note: This field will default to Ascending.	O
CustomerLookUpSearchCriteria.SortColumn CustomerLookUp	Enumeration	This is the primary sort order the results are returned in. Valid Values:" <ul style="list-style-type: none">• PostedDate• CustomerReferenceID• Amount• tranNr• TransStatus• TransType• MerchantID• AccountHolderNumber	M
PageRequest.PageCount	n..7	Displays the page start index	M
PageRequest.PageSize	n..1000	Displays the number of records shown on the page	M

Example Request:

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
    },  
  "CustomerLookUpSearchCriteria": {  
    "MerchantID": "1234567890",  
    "SalesType": "All",  
  },
```



```
"SearchID": "1477953518760115372",
"SearchType": "RecurringID",
"SortCriteriaCustomerLookUp": {
    "AscDescFlag": "Ascending",
    "SortColumnCustomerLookUp": "PostedDate"
},
"PageRequest": {
    "PageCount": 1,
    "PageSize": 1000
}
```

DO NOT COPY



Example Response:

```
<DataRecordTransactionDetails>
  <e>
    <ACHReturnCode/>
    <AccHolderNumber>448589*****7708</AccHolderNumber>
    <AuthAmount>0.01</AuthAmount>
    <AuthorizationCode>Lexc05</AuthorizationCode>
    <CardHolderName>Bill Lastname</CardHolderName>
    <CardType>VISA</CardType>
    <CustomerReferenceID>CRI Normal Visa</CustomerReferenceID>
    <DeviceID/>
    <ExpirationDate>
      <MM>11</MM>
      <YY>16</YY>
    </ExpirationDate>
    <MerchantDBAName>Test Integrations 3</MerchantDBAName>
    <MerchantID>9000</MerchantID>
    <Notes>Refer to card issuer</Notes>
    <PaymentType>CreditCard</PaymentType>
    <PostedDate>/Date(1477985176730-0700)/</PostedDate>
    <ReSubmitted>false</ReSubmitted>
    <RecurringProfileId>1477953518760115372</RecurringProfileId>
    <RequestedAmount>0.01</RequestedAmount>
    <RoutingNumber/>
    <SalesType>Sale</SalesType>
    <TransactionStatus>Declined</TransactionStatus>
    <TransactionType>AuthorizationAndSettle</TransactionType>
    <TransactionTypeIndicator>0</TransactionTypeIndicator>
    <UserName>RPE</UserName>
    <WalletId>1477694712046126039</WalletId>
    <isPartialAuthorization>false</isPartialAuthorization>
    <tranNr>12916551</tranNr>
  </e>
</DataRecordTransactionDetails>
<RecordCount>1</RecordCount>
```



8.19 Get ACH Running Balance

This method returns a running balance for a single merchant/group. Note: Refund/Credit Amounts lead with a “-“ symbol. All element paths in this method are prefaced by GetACHRunningBalance. For example, GetACHRunningBalance.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C/O
ACHRunningBalanceSearchCriteria.FromDate	DateTime	<p>This is the start date of the report.</p> <p>Note:</p> <ul style="list-style-type: none">The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.When reporting for ACH, the time zone must be set to 0:00.	M
ACHRunningBalanceSearchCriteria.GatewayID	ans..15	<p>15-Digit Merchant Gateway ID</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none">- <p>Conditions:</p> <ul style="list-style-type: none">You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C
ACHRunningBalanceSearchCriteria.SortCriteriaACHRunningBalance.AscDescFlag	Enumeration	<p>This specifies the response type.</p> <p>Valid Values:</p> <ul style="list-style-type: none">AscendingDescending	O
ACHRunningBalanceSearchCriteria.SortCriteriaACHRunningBalance.SortColumnNumACHRunningBalance	Enumeration	<p>This specifies the sort column names.</p> <p>Valid Values:</p> <ul style="list-style-type: none">CreditAmountCurrentBalanceAmountDebitAmountDescriptionBalanceActivityDate	O



ACHRunningBalanceSearchCriteria.ToDate	DateTime	<p>This is the end date of the report.</p> <p>Note:</p> <ul style="list-style-type: none"> • ToDate must not exceed Today's date, so future dates cannot be queried. • When reporting for ACH, the time zone must be set to 0:00. 	M
Credential.MerchantInfo.MerchantID	ans..15	<p>15-Digit Merchant Gateway ID</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> • _ <p>Note: A special character cannot be the first character in this field.</p>	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
PageRequest.PageCount	n..7	Identifies the expected page count. Maximum 1	M
PageRequest.PageSize	n..1000	Identifies the number of transactions. Maximum 1000 records per page count.	M

Example Request:

```
{
  "ACHRunningBalanceSearchCriteria": {
    "FromDate": "2016-01-01T12:00:00.000-07:00",
    "GatewayID": "1234567890",
    "SortCriteriaACHRUnningBalance": {
      "AscDescFlag": "Ascending",
      "SortColumnNumACHRUnningBalance": "CreditAmount"
    },
    "ToDate": "2016-01-01T12:00:00.000-07:00"
  },
  "Credential": {
    "MerchantInfo": {
      "MerchantID": "1234567890",
      "RegistrationKey": "MNLPYTT6EDP9HP7H",
      ...
    }
  },
  "PageRequest": {
    "PageCount": 1,
    "PageSize": 1000
  }
}
```

***Example Response:***

```
{  
    "ACHRunningBalanceCol": [  
        {  
            "BalanceActivityDate": "/Date(-62135596800000-0800)/",  
            "CreditAmount": 0,  
            "CurrentBalanceAmount": 0,  
            "DebitAmount": 0,  
            "Description": "Description"  
        },  
        {  
            "BalanceActivityDate": "/Date(1344495600000-0700)/",  
            "CreditAmount": 0,  
            "CurrentBalanceAmount": 0,  
            "DebitAmount": -272664.03,  
            "Description": "Positive Settlement To Merchant"  
        },  
        {  
            "BalanceActivityDate": "/Date(1344495600000-0700)/",  
            "CreditAmount": 0,  
            "CurrentBalanceAmount": 272664.03,  
            "DebitAmount": -2340.15,  
            "Description": "Returned ACH Debits"  
        },  
        {  
            "BalanceActivityDate": "/Date(1344236400000-0700)/",  
            "CreditAmount": 275292.78,  
            "CurrentBalanceAmount": 275292.78,  
            "DebitAmount": 0,  
            "Description": "ACH Debits Originated"  
        },  
        {  
            "BalanceActivityDate": "/Date(1339138800000-0700)/",  
            "CreditAmount": 0,  
            "CurrentBalanceAmount": 0,  
            "DebitAmount": -301685.75,  
            "Description": "Positive Settlement To Merchant"  
        },  
        {  
            "BalanceActivityDate": "/Date(1339052400000-0700)/",  
            "CreditAmount": 0,  
            "CurrentBalanceAmount": 302742.55,  
            "DebitAmount": -451.8,  
            "Description": "Returned ACH Debits"  
        },  
        {  
    ]  
}
```



```
"BalanceActivityDate": "/Date(1315551600000-0700)/",
"CreditAmount": 0,
"CurrentBalanceAmount": 295706.8,
"DebitAmount": -234,
"Description": "Returns processed from exception"
},
{
"BalanceActivityDate": "/Date(1315292400000-0700)/",
"CreditAmount": 297960.1,
"CurrentBalanceAmount": 297960.1,
"DebitAmount": 0,
"Description": "ACH Debits Originated"
}
],
"AchGatewayID": "1234567890",
"FromDate": "/Date(1451674800000-0800)/",
"ToDate": "/Date(1451674800000-0800)/"
}
```

DO NOT COPY



8.20 Get ACH Daily Account Statement

This method returns a daily account statement for a single merchant. Note: Refund/Credit Amounts lead with a “-“ symbol. All element paths in this method are prefaced by GetACHDailyAccountStatement. For example, GetACHDailyAccountStatement.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C/O
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">•– Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
DailyAccountStatementSearchCriteria.EffEntryDate	DateTime	This is the date the ACH was entered. Note: When reporting for ACH, the time zone must be set to 0:00.	M
DailyAccountStatementSearchCriteria.GatewayID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">•– Conditions: <ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. Note: A special character cannot be the first character in this field.	C
DailyAccountStatementSearchCriteria.ProcessedDate	DateTime	This is the date the ACH was processed. Note: When reporting for ACH, the time zone must be set to 0:00.	M

Example Request:

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
    "DailyAccountStatementSearchCriteria": {  
    }  
  }  
}
```



```
"EffEntryDate": "2016-01-01T00:00:00.000-07:00",
"GatewayID": "1234567890",
"ProcessedDate": "2016-01-01T00:00:00.000-07:00"
}
}
```

DO NOT COPY

***Example Response:***

```
{  
    "AchGatewayID": "1234567890",  
    "DailyProcessingDetailsCol": [ {  
        "AchID": "1234567890",  
        "ReceivedDate": "/Date(1451548800000-0800)/",  
        "TotalCancelled": 1,  
        "TotalCancelledAmount": 1.34,  
        "TotalDeclined": 1,  
        "TotalDeclinedAmount": 1.3,  
        "TotalIncomplete": 1,  
        "TotalIncompleteAmount": 1.33,  
        "TotalSent": 128,  
        "TotalSentAmount": 171.37  
    }],  
    "DailySummaryTotalsCol": [ {  
        "AchID": "1234567890",  
        "EstFundDate": "/Date(1473836400000-0700)/",  
        "TotalBOException": 34,  
        "TotalBOExceptionAmount": 6.55,  
        "TotalCancelled": 1,  
        "TotalCancelledAmount": 1.34,  
        "TotalChargebacks": 10,  
        "TotalChargebacksAmount": 6.07,  
        "TotalCreditOrig": 0,  
        "TotalCreditOrigAmount": 0,  
        "TotalCreditReturns": 1,  
        "TotalCreditReturnsAmount": 0.81,  
        "TotalDeclined": 1,  
        "TotalDeclinedAmount": 1.3,  
        "TotalGrossOrig": 91,  
        "TotalGrossOrigAmount": 75.42,  
        "TotalIncomplete": 1,  
        "TotalIncompleteAmount": 1.33,  
        "TotalInvalids": 5,  
        "TotalInvalidsAmount": 2.95,  
        "TotalNSF": 5,  
        "TotalNSFAmount": 4.63,  
        "TotalOrig": 91,  
        "TotalOrigAmount": 75.42,  
        "TotalOtherReturns": 53,  
        "TotalOtherReturnsAmount": 43.41,  
        "TotalReturned": 74,  
        "TotalReturnedAmount": 57.87,  
        "TotalSent": 128,  
        "TotalSentAmount": 171.37  
    }]  
}
```



```
}],
"DepositAmount": -73.7965,
"ProcessedDate": "/Date(1451631600000-0800)/",
"SettlementDetailsCol": [
    {
        "AchID": "1234567890",
        "DiscountRateFees": 0.025,
        "EffectiveDate": "/Date(1388480820000-0800)/",
        "FraudCheckFees": 0,
        "GrossSettled": 2.5,
        "NOCCount": 0,
        "NOCFees": 0,
        "NetSettleAmount": 0.475,
        "OrigCreditCount": 0,
        "OrigCreditSum": 0,
        "OrigDebitCount": 2,
        "OrigDebitSum": 2.5,
        "ReserveHeld": 0,
        "ReturnCount": 0,
        "ReturnFees": 0,
        "ReturnSum": 0,
        "TransactionFees": 2
    },
    {
        "AchID": "1234567890",
        "DiscountRateFees": 0.0127,
        "EffectiveDate": "/Date(1388480880000-0800)/",
        "FraudCheckFees": 0,
        "GrossSettled": 0,
        "NOCCount": 0,
        "NOCFees": 0,
        "NetSettleAmount": -2.0127,
        "OrigCreditCount": 0,
        "OrigCreditSum": 0,
        "OrigDebitCount": 1,
        "OrigDebitSum": 1.27,
        "ReserveHeld": 0,
        "ReturnCount": 1,
        "ReturnFees": 1,
        "ReturnSum": 1.27,
        "TransactionFees": 1
    },
    {
        "AchID": "1234567890",
        "DiscountRateFees": 0.021,
        "EffectiveDate": "/Date(1420018140000-0800)/",
        "FraudCheckFees": 0,
        "GrossSettled": 0,
        "NOCCount": 0,
        "NOCFees": 0,
        "NetSettleAmount": 0.021,
        "OrigCreditCount": 0,
        "OrigCreditSum": 0,
        "OrigDebitCount": 0,
        "OrigDebitSum": 0,
        "ReserveHeld": 0,
        "ReturnCount": 0,
        "ReturnFees": 0,
        "ReturnSum": 0,
        "TransactionFees": 0
    }
]
```



```
"FraudCheckFees": 0,  
"GrossSettled": 0,  
"NOCCount": 0,  
"NOCFees": 0,  
"NetSettleAmount": -4.021,  
"OrigCreditCount": 0,  
"OrigCreditSum": 0,  
"OrigDebitCount": 2,  
"OrigDebitSum": 2.1,  
"ReserveHeld": 0,  
"ReturnCount": 2,  
"ReturnFees": 2,  
"ReturnSum": 2.1,  
"TransactionFees": 2  
},  
{  
    "AchID": "1234567890",  
    "DiscountRateFees": 0.0128,  
    "EffectiveDate": "/Date(1420018740000-0800)/",  
    "FraudCheckFees": 0,  
    "GrossSettled": 0,  
    "NOCCount": 0,  
    "NOCFees": 0,  
    "NetSettleAmount": -2.0128,  
    "OrigCreditCount": 0,  
    "OrigCreditSum": 0,  
    "OrigDebitCount": 1,  
    "OrigDebitSum": 1.28,  
    "ReserveHeld": 0,  
    "ReturnCount": 1,  
    "ReturnFees": 1,  
    "ReturnSum": 1.28,  
    "TransactionFees": 1  
}  
]
```



8.21 Get ACH Daily Remittance

This method returns a listing of ACH transactions for the specified settlement date for a single merchant. Note: Refund/Credit Amounts lead with a “-” symbol. All element paths in this method are prefaced by GetACHDailyRemittance. For example, GetACHDailyRemittance.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C/O
ACHDailyRemittanceSearchCriteria.GatewayID	ans..15	<p>15-Digit Merchant Gateway ID Valid Special Characters:</p> <ul style="list-style-type: none">– <p>Conditions:</p> <ul style="list-style-type: none">You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C
ACHDailyRemittanceSearchCriteria.OriginalTraceID	a..15	This is the original Trace ID of the transaction.	M
ACHDailyRemittanceSearchCriteria.SettleDate	DateTim e	The settle date of the ACH transactions. Note: When reporting for ACH, the time zone must be set to 0:00.	M
ACHDailyRemittanceSearchCriteria.SortCriteriaACHDailyRemittance.AscDescFlag	Enumeration	<p>This specifies the response type. Valid Values:</p> <ul style="list-style-type: none">AscendingDescending <p>Note: This field will default to Ascending.</p>	O



ACHDailyRemittanceSearchCriteria. SortCriteriaACHDailyRemittance. SortColumnNumACHDailyRemittance	Enumeration	<p>This specifies the sort column names.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> • CollectedAmount • CreditAmount • DebitAmount • DisbursedAmount • DiscountRateFees • EffectiveEntryDate • tranNr • FraudCheckFees • CustomerName • TransactionFees • CustomerRefID • ReturnCode • ReturnDate • ReturnFees • OriginalTraceID 	O
Credential.MerchantInfo.MerchantID	ans..15	<p>15-Digit Merchant Gateway ID</p> <p>Valid Special Characters:</p> <ul style="list-style-type: none"> • _ <p>Note: A special character cannot be the first character in this field.</p>	M
Credential.MerchantInfo.RegistrationKey	ans..16	Merchant Registration Key	M
PageRequest.PageCount	n..7	Identifies the expected page count. Maximum 1	M
PageRequest.PageSize	n..1000	Identifies the number of transactions. Maximum 1000 records per page count.	M

Example Request:

```
{
  "ACHDailyRemittanceSearchCriteria": {
    "GatewayID": "1234567890",
    "SettleDate": "2016-01-01T00:00:00.000-07:00",
    "SortCriteriaACHDailyRemittance": {
      "AscDescFlag": "Ascending",
      "SortColumnACHDailyRemittance": "CollectedAmount"
    }
  },
  "Credential": {
    "MerchantInfo": {
      "MerchantID": "1234567890",
      "RegistrationKey": "MNLPYTT6EDP9HP7H",
    }
  }
}
```



```
},
"PageRequest": {
  "PageCount": 1,
  "PageSize": 1000
}
}
```

Example Response:

```
{
  "AchGatewayID": "1234567890",
  "DailyRemittanceCol": [
    {
      "ACHTransactionID": "1797431354",
      "CollectedAmount": 0,
      "CreditAmount": 0,
      "CustomerName": "John Smith",
      "CustomerRefID": "C06",
      "DebitAmount": 0,
      "DisbursedAmount": -1,
      "DiscountRateFees": 0,
      "EffectiveEntryDate": "/Date(1451548800000-0800)/",
      "FraudCheckFees": 0,
      "OriginalTraceID": "197236652032208",
      "ReturnCode": "C06",
      "ReturnDate": "/Date(1452672000000-0800)/",
      "ReturnFees": 1,
      "TransactionFees": 0,
      "tranNr": 23120391
    },
    {
      "ACHTransactionID": "1797431360",
      "CollectedAmount": 0,
      "CreditAmount": 0,
      "CustomerName": "John Smith",
      "CustomerRefID": "C11",
      "DebitAmount": 0,
      "DisbursedAmount": -1,
      "DiscountRateFees": 0,
      "EffectiveEntryDate": "/Date(1451548800000-0800)/",
      "FraudCheckFees": 0,
      "OriginalTraceID": "749181692715401",
      "ReturnCode": "C11",
      "ReturnDate": "/Date(1452672000000-0800)/",
      "ReturnFees": 1,
      "TransactionFees": 0,
      "tranNr": 23120441
    }
},
```



```
{  
    "ACHTransactionID": "1797431368",  
    "CollectedAmount": 0,  
    "CreditAmount": 0,  
    "CustomerName": "John Smith",  
    "CustomerRefID": "C07",  
    "DebitAmount": 0,  
    "DisbursedAmount": -1,  
    "DiscountRateFees": 0,  
    "EffectiveEntryDate": "/Date(1451548800000-0800)/",  
    "FraudCheckFees": 0,  
    "OriginalTraceID": "779142732231758",  
    "ReturnCode": "C07",  
    "ReturnDate": "/Date(1452672000000-0800)/",  
    "ReturnFees": 1,  
    "TransactionFees": 0,  
    "tranNr": 23120401  
}  
,  
    "SettleDate": "/Date(1451631600000-0800)"/  
}
```

DONOTCOPY



8.22 Get ACH Monthly Statement

This method returns a listing of ACH transactions for the specified month and year for a single merchant. All element paths in this method are prefaced by `GetACHMonthlyStatement`. For example, `GetACHMonthlyStatement.Credential.MerchantInfo.MerchantID`.

Element	Type	Description	M/C/O
ACHMonthlyStatementSearchCriteria.GatewayID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• _ Conditions: <ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. Note: A special character cannot be the first character in this field.	C
ACHMonthlyStatementSearchCriteria.Month	ans..2	The month of the ACH transactions. MM	M
ACHMonthlyStatementSearchCriteria.SortCriteriaACHMonthlyStatement.AscDescFlag	Enumeration	This specifies the response type. Valid Values: <ul style="list-style-type: none">• Ascending• Descending Note: This field will default to Ascending.	O
ACHMonthlyStatementSearchCriteria.SortCriteriaACHMonthlyStatement.SortColumnNumACHMonthlyStatement	Enumeration	This specifies the sort column names. Valid Values: <ul style="list-style-type: none">• AchId• LIDescription• LICount• LIAmount• Fee• Discount• FeesAssessed	O
ACHMonthlyStatementSearchCriteria.Year	ans..4	The year of the ACH transactions. YYYY	M



Transaction Express Integration Guide



Credential.MerchantInfo.MerchantID	Ans..15	15-Digit Merchant Gateway ID Valid Special Characters: • – Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	Ans..16	Merchant Registration Key	M

DO NOT COPY



Example Request:

```
{  
  "ACHMonthlyStatementSearchCriteria": {  
    "GatewayID": "1234567890",  
    "Month": "01",  
    "SortCriteriaACHMonthlyStatement": {  
      "AscDescFlag": "Ascending",  
      "SortColumnNumACHMonthlyStatement": "AchId"  
    },  
    "Year": "2016"  
  },  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
  },  
}
```

Example Response:

```
{  
  "AchGatewayID": "1234567890",  
  "CustomerName": "Barnes & Noble White",  
  "DataRecordProcessingFees": {  
    "DiscountPercentage": 1,  
    "FraudCheckFeeAmount": 0,  
    "MonthlyMaintFeeAmount": 0,  
    "ReturnFeeAmount": 1,  
    "SettlementFeeAmount": 0,  
    "TransactionFeeAmount": 1  
  },  
  "GatewayID": "1234567890",  
  "LineItemSummaryCol": [ {  
    "AchId": "1234567890",  
    "Discount": 0,  
    "Fee": 0,  
    "FeesAssessed": 0,  
    "LIAmount": 0,  
    "LICount": 0,  
    "LIDescription": "Origination"  
  }],  
  "StatementPeriod": "1/1/2016 - 1/31/2016"  
}
```



8.23 Get ACH Reserves Details

This method reports the amount of reserve dollars held by the ACH processor for a single merchant. All element paths in this method are prefaced by `GetACHReservesDetails`. For example,
`GetACHReservesDetails.Credential.MerchantInfo.MerchantID`.

Element	Type	Description	M/C/O
<code>ACHReservesDetailsSearchCriteria.GatewayID</code>	<code>ans..15</code>	<p>15-Digit Merchant Gateway ID Valid Special Characters:</p> <ul style="list-style-type: none">– <p>Conditions:</p> <ul style="list-style-type: none">You may enter a different <code>MerchantID</code> than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C
<code>ACHReservesDetailsSearchCriteriaGroupID</code>	<code>ans..15</code>	<p>15 digit GroupID Conditions:</p> <ul style="list-style-type: none"><code>MerchantID</code> or <code>GroupID</code> must be present in the request.	C
<code>ACHReservesDetailsSearchCriteria.SortCriteriaACHReservesDetails.AscDescFlag</code>	Enumeration	<p>This specifies the response type. Valid Values:</p> <ul style="list-style-type: none">AscendingDescending <p>Note: This field will default to Ascending.</p>	O
<code>ACHReservesDetailsSearchCriteria.SortCriteriaACHReservesDetails.SortColumnNumACHReservesDetails</code>	Enumeration	<p>This specifies the sort column names. Valid Values:</p> <ul style="list-style-type: none"><code>AvailableBalance</code><code>ACHGatewayID</code><code>ReservePercentage</code><code>MerchantDBAName</code><code>ReservePeriod</code>	O
<code>Credential.MerchantInfo.MerchantID</code>	<code>ans..15</code>	<p>15-Digit Merchant Gateway ID Valid Special Characters:</p> <ul style="list-style-type: none">– <p>Note: A special character cannot be the first character in this field.</p>	M
<code>Credential.MerchantInfo.RegistrationKey</code>	<code>an..16</code>	Merchant Registration Key	M



PageRequest.PageCount	n..7	Identifies the expected page count. Maximum 1	M
PageRequest.PageSize	n..1000	Identifies the number of transactions. Maximum 1000 records per page count.	M

DO NOT COPY



Example Request:

```
{  
    "ACHReservesDetailsSearchCriteria": {  
        "GatewayID": "1234567890",  
        "SortCriteriaACHReservesDetails": {  
            "AscDescFlag": "Ascending",  
            "SortColumnNumACHReservesDetails": "AvailableBalance"  
        }  
    },  
    "Credential": {  
        "MerchantInfo": {  
            "MerchantID": "1234567890",  
            "RegistrationKey": "MNLPYTT6EDP9HP7H",  
        },  
    },  
    "PageRequest": {  
        "PageCount": 1,  
        "PageSize": 1000  
    }  
}
```

Example Response:

```
{  
    "ACHReservesDetailsCol": [ {  
        "AchID": "1234567890",  
        "AvailableBalance": 0,  
        "DBAName": "Barnes & Noble Red",  
        "ReservePercentage": 0,  
        "ReservePeriod": "0"  
    }],  
    "Date": "/Date(1473795812928-0700)/",  
    "GroupID": "1234567890",  
    "GroupName": "Barnes & Noble White"  
}
```



8.24 Get ACH Returns

This method provides a list of ACH transactions for a single merchant that did not process. All element paths in this method are prefaced by GetACHReturns. For example, GetACHReturns.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C/O
ACHReturnsSearchCriteria.CustomerReferenceID	Ans..50	User Defined Reference Value Valid Special Characters: <ul style="list-style-type: none">• – Note: A special character cannot be the first character.	O
ACHReturnsSearchCriteria.FromDate	DateTime	This is the start date of the report. Note: <ul style="list-style-type: none">• The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.• When reporting for ACH, the time zone must be set to 0:00.	M
ACHReturnsSearchCriteria.GatewayID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• – Conditions: <ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. Note: A special character cannot be the first character in this field.	C
ACHReturnsSearchCriteria.ToDate	DateTime	This is the end date of the report. Note: <ul style="list-style-type: none">• ToDate must not exceed Today's date, so future dates cannot be queried.• When reporting for ACH, the time zone must be set to 0:00.	M
ACHReturns.tranNr	n..19	Unique ID generated when a transaction is processed.	O



Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: • – Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	Ans..16	Merchant Registration Key	M
PageRequest.PageCount	n..7	Identifies the expected page count. Maximum 1	M
PageRequest.PageSize	n..1000	Identifies the number of transactions. Maximum 1000 records per page count.	M

Example Request:

```
{  
  "ACHReturnsSearchCriteria": {  
    "FromDate": "2016-01-01T00:00:00.000-07:00",  
    "GatewayID": "1234567890",  
    "ToDate": "2016-03-03T00:00:00.000-07:00",  
    },  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
      },  
    },  
  "PageRequest": {  
    "PageCount": 1,  
    "PageSize": 1000  
  }  
}
```

***Example Response:***

```
{  
    "ACHGatewayID": "1234567890",  
    "DataRecordsACHReturns": [  
        {  
            "AccountNumber": "*****6789",  
            "Amount": 1,  
            "CustomerName": "Joe Test",  
            "CustomerRefID": "",  
            "ReturnCode": "R73",  
            "ReturnDate": "/Date(1455523200000-0800)/",  
            "ReturnTraceID": "114513494098427",  
            "RoutingNumber": "123456780",  
            "TransactionStatus": "Returned",  
            "tranNr": 11815081  
        },  
        {  
            "AccountNumber": "*****6789",  
            "Amount": 1,  
            "CustomerName": "Joe Test",  
            "CustomerRefID": "",  
            "ReturnCode": "R73",  
            "ReturnDate": "/Date(1455523200000-0800)/",  
            "ReturnTraceID": "889884511554084",  
            "RoutingNumber": "123456780",  
            "TransactionStatus": "Returned",  
            "tranNr": 11815091  
        },  
        {  
            "AccountNumber": "*****6789",  
            "Amount": 1,  
            "CustomerName": "Joe Test",  
            "CustomerRefID": "",  
            "ReturnCode": "R73",  
            "ReturnDate": "/Date(1455782400000-0800)/",  
            "ReturnTraceID": "845207914923214",  
            "RoutingNumber": "123456780",  
            "TransactionStatus": "Returned",  
            "tranNr": 11839051  
        }  
}
```



8.25 Get ACH Settlements

This method provides a listing of settled ACH transactions for a single merchant in a given month and year. Note: Refund/Credit Amounts lead with a “-” symbol. All element paths in this method are prefaced by GetACHSettlements. For example, GetACHSettlements.Credential.MerchantInfo.MerchantID.

Element	Type	Description	M/C/O
ACHSettlementSummarySearch Criteria.GatewayID	ans..15	<p>15-Digit Merchant Gateway ID Valid Special Characters:</p> <ul style="list-style-type: none">• _ <p>Conditions:</p> <ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. <p>Note: A special character cannot be the first character in this field.</p>	C
ACHSettlementSummarySearch Criteria.RptMonth	n2	This is the search month of the report. (MM)	M
ACHSettlementSummarySearch Criteria.RptYear	n4	This is the search year of the report. (YYYY)	M
ACHSettlementSummarySearch Criteria.SortCriteriaACHSettlementSummary.AscDescFlag	Enumeration	<p>This specifies the response type. Valid Values:</p> <ul style="list-style-type: none">• Ascending• Descending <p>Note: This field will default to Ascending.</p>	O
ACHSettlementSummarySearch Criteria.SortCriteriaACHSettlementSummary.SortColumnNumA CHSettlementSummary	Enumeration	<p>This specifies the sort column names. Valid Values:</p> <ul style="list-style-type: none">• SettleDate• OriginatedAmount• ReturnedAmount• TransactionFees• DiscountRateFees• ReturnFees• FraudCheckFees• DisbursedAmount• ReserveHeld	O



Credential.MerchantInfo. MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: • – Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo. RegistrationKey	ans..16	Merchant Registration Key	M
PageRequest.PageCount	n..7	Identifies the expected page count. Maximum 1	M
PageRequest.PageSize	n..1000	Identifies the number of transactions. Maximum 1000 records per page count.	M

Example Request:

```
{
  "ACHSettlementSummarySearchCriteria": {
    "GatewayID": "1234567890",
    "RptMonth": 04,
    "RptYear": 2016,
    "SortCriteriaACHSettlementSummary": {
      "AscDescFlag": "Ascending",
      "SortColumnNumACHSettlementSummary": "SettleDate"
    },
    "Credential": {
      "MerchantInfo": {
        "MerchantID": "1234567890",
        "RegistrationKey": "MNLPYTT6EDP9HP7H",
      },
      "PageRequest": {
        "PageCount": 1,
        "PageSize": 1000
      }
    }
}
```

Example Response:

```
{
  "ACHSettlementSummaryCol": [
    {
      "DisbursedAmount": -1.79,
      "DiscountRateFees": -0.04,
      "FraudCheckFees": 0,
      "OriginatedAmount": 1.25,
      "ReserveHeld": 0,
```



```
"ReturnFees": 0,  
"ReturnedAmount": 0,  
"RptType": "Day",  
"SettleDate": "/Date(1460790000000-0700)/",  
"TransactionFees": -3  
},  
{  
    "DisbursedAmount": 0.48,  
    "DiscountRateFees": -0.03,  
    "FraudCheckFees": 0,  
    "OriginatedAmount": 2.5,  
    "ReserveHeld": 0,  
    "ReturnFees": 0,  
    "ReturnedAmount": 0,  
    "RptType": "Day",  
    "SettleDate": "/Date(1460790000000-0700)/",  
    "TransactionFees": -2  
},  
{  
    "DisbursedAmount": 0.48,  
    "DiscountRateFees": -0.03,  
    "FraudCheckFees": 0,  
    "OriginatedAmount": 2.5,  
    "ReserveHeld": 0,  
    "ReturnFees": 0,  
    "ReturnedAmount": 0,  
    "RptType": "Day",  
    "SettleDate": "/Date(1460876400000-0700)/",  
    "TransactionFees": -2  
},  
{  
    "DisbursedAmount": 0.48,  
    "DiscountRateFees": -0.03,  
    "FraudCheckFees": 0,  
    "OriginatedAmount": 2.5,  
    "ReserveHeld": 0,  
    "ReturnFees": 0,  
    "ReturnedAmount": 0,  
    "RptType": "Day",  
    "SettleDate": "/Date(1460962800000-0700)/",  
    "TransactionFees": -2  
},  
{  
    "DisbursedAmount": 0.3,  
    "DiscountRateFees": -0.01,  
    "FraudCheckFees": 0,
```



```
"OriginatedAmount": 1.31,  
"ReserveHeld": 0,  
"ReturnFees": 0,  
"ReturnedAmount": 0,  
"RptType": "Day",  
"SettleDate": "/Date(1461308400000-0700)/",  
"TransactionFees": -1  
}  
],  
"AchGatewayID": "1234567890",  
"SettlementDataFor": "4/2016"  
}
```

DO NOT COPY



8.26 Get Notice of Change List

This method provides a listing of ACH Notice of Change transactions for a single merchant. Note: *NOCInformation field indicates the corrected/updated data.

Element	Type	Description	M/C/O
Credential.MerchantInfo.MerchantID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• – Note: A special character cannot be the first character in this field.	M
Credential.MerchantInfo.RegistrationKey	an..16	Merchant Registration Key	M
NOCSearchCriteria.FromDate	DateTime	This is the start date of the report. Note: <ul style="list-style-type: none">• The report can be queried for a maximum 62 days at a time. FromDate can be up to 13 months prior to current date.• When reporting for ACH, the time zone must be set to 0:00.	M
NOCSearchCriteria.GatewayID	ans..15	15-Digit Merchant Gateway ID Valid Special Characters: <ul style="list-style-type: none">• – Conditions: <ul style="list-style-type: none">• You may enter a different MerchantID than the Credential in this element, but you must have permissions to view its data. Note: A special character cannot be the first character in this field.	M
NOCSearchCriteria.ToDate	DateTime	This is the end date of the report. Note: <ul style="list-style-type: none">• ToDate must not exceed Today's date, so future dates cannot be queried.• When reporting for ACH, the time zone must be set to 0:00.	M
PageRequest.PageCount	n..7	Identifies the expected page count. Maximum 1	M



PageRequest.PageSize	n..1000	Identifies the number of transactions. Maximum 1000 records per page count.	M
----------------------	---------	--	---

Example Request:

```
{  
  "Credential": {  
    "MerchantInfo": {  
      "MerchantID": "1234567890",  
      "RegistrationKey": "MNLPYTT6EDP9HP7H",  
    },  
  },  
  "NOCSearchCriteria": {  
    "FromDate": "2016-06-01T00:00:00.000-07:00",  
    "GatewayID": "1234567890",  
    "ToDate": "2016-07-05T00:00:00.000-07:00"  
  },  
  "PageRequest": {  
    "PageCount": 1,  
    "PageSize": 1000  
  }  
}
```

Example Response:

```
{  
  "DataRecordsNOC": [  
    {  
      "ACHReturnCode": "C11",  
      "ACHReturnMessage": "Incorrect Company Identification",  
      "AccountNumber": "*****5555",  
      "CustomerName": "Testing",  
      "CustomerReferenceID": "0000622#GO#A",  
      "NOCIInformation": "",  
      "PostedDate": "/Date(1484842322037-0800)/",  
      "RecurringProfileID": "",  
      "RoutingNumber": "123456780",  
      "TransactionID": "24542251"  
    }  
  ],  
  "GatewayID": "1234567890",  
  "RecordCount": 1  
}
```



9 Appendix

9.1 Allowed Special Characters

Symbol	Description
SP	Space. Note "SP" is used to represent the space character in this document. If you intend to use this special character, the web services expect the space character rather than "SP".
!	Exclamation mark (Supplying this field in the customer ref id has the potential to cause a security issue and block the transaction)
#	Number sign
\$	Dollar sign
%	Percent sign
(Open parenthesis
)	Close parenthesis
*	Asterisk
+	Plus sign
,	Comma
-	Hyphen
.	Period
/	Slash
:	Colon
;	Semicolon
?	Question mark
@	At sign (Allowed for email address field Only)
[Open square bracket
\	Backslash
]	Close square bracket
^	Caret
_	Underscore
`	Grave accent
{	Open bracket
}	Close bracket



Symbol	Description
~	Tilde

9.2 Allowed P2Pe Characters

List Of Valid Characters
A-Z
a-z
0-9
Space
!"#\$%&()'*+,.-/:;<=>?@[{}]^_`{ }~

9.3 Fault

The Transaction Express Merchant Web Service can generate error messages as a response back to the remote entity by sending ServiceFaults or SystemFaults (referred to as faults collectively). Virtually all previously described services can send faults.

Element	Type	No	Description
name	ans	..9999	This is the name of the fault.
message	ans	..9999	This is the message description of the fault.
errorCode	ans	..9999	This is the error code of the fault.



9.4 Error Codes

9.4.1 General Error Codes

Code	Description
10000	Undefined Error
10012	Decrypt Error
10013	Invalid App Key
10014	Unable to Validate App Key
11502	Bad Gateway
11504	Gateway Timeout
50000	Undefined error code. Please check the error message.
50001	Database exception.
50002	Unhandled exception.
50003	This is returned if the following is true: No response was received from the upstream entity (i.e., eSocket Server) for a given amount of time. Default is 30 seconds.
50004	No record found.
50005	Too many records found.
50006	Record already exists.
50007	Database access failure.
50008	Authentication failed because of incomplete information (e.g., password not specified).
50009	No record updated.
50010	Access denied.
50011	Schema validation error.
50012	Authentication failed because of wrong information (e.g., wrong password).
50013	System failure.
50014	User is active but locked.
50015	User is inactive.
50016	User is inactive and locked.
50017	Password is expired.
50019	User must change password.



Code	Description
50020	Old password and new password are the same but not expected.
50021	Request is expected but not set.
50022	User is not linked to a merchant or group.
50023	Password or Registration Key failed WSDL validation.
50024	Failed to send email.
50025	User ID and password are set, but Merchant ID is not set.
50026	Active/Active initialization failed.
50027	Encryption/decryption failed.
50028	Invalid Date Format
50029	Merchant Closed
800002	Given Credentials are not authenticated and/or Access Denied



9.4.2 FndRecurrProf Error Codes

Code	Description
51500	recurProfCrtा.İd can only be set for non-TSYS user.
51501	prodCrtा is set and also recurProfCrtा or custCrtा is set.
51502	The customer type should be set when recurProfCrtा or custCrtा is set and not when prodCrtा is set.

9.4.3 SendTran Error Codes

Code	Description
51300	Failed creating Iso8583Post message.
51301	Duplicate user-defined name.
51302	Failed creating SendTranResponse message.
51303	UCAF data is expected but not set.
51304	UCAF data is set but not expected.
51305	Discount amount not set but expected.
51306	Merchant ID is expected but not set.
51307	PAN, expiry date, security code, or sequence number is set but not expected. This happens when Track 2 is also present.
51308	Track data or PAN failed format validation.
51309	Track 2 and PAN are not set, but one is expected.
51310	card.dbtOrCdt is set to 0, but the card.type is not VISA or MasterCard.
51311	Extra data set but not expected.
51312	Track 2 data is expected but not set.
51313	Authorization request element is set but not expected.
51314	Card element is expected but not set.
51315	DbtOrCdt element is set to an unexpected value.
51316	UCAF data and/or UCAF indicator are set but not expected.
51317	Transaction data element is set but not expected.
51318	Recurring payment element is set but not expected.
51319	Reverse Auth on Void element is set but not expected.
51320	usrDef.val element is expected but not set.



Code	Description
51321	Invalid POS Entry Mode.
51322	Invalid Cardholder Authentication Capability.
51323	Invalid Cardholder Authentication Method.
51324	usrDef is expected but not set.
51325	Invalid Cardholder Present.
51326	Invalid Card Present.
51327	Invalid Card Data Input Mode.
51328	Recurring payment element is expected but not set.
51329	Initial Recurring Payment Indicator is expected but not set.
51330	Payment Number element is expected but not set.
51331	Number of Payments element is expected but not set.
51332	Transaction Number element is expected but not set.
51333	Resubmit element is set but not expected.
51334	Invalid Amount/Amount is set but not expected
51335	Original Transaction Data element is expected but not set.
51336	If XID element is set, then CAVV is expected but not set.
51337	If CAVV element is set, then XID is expected but not set.
51338	Invalid Electronic Signature.
51339	Reverse Authorization on Void element is set but not expected.
51340	Managed Settlement Flag element is set but not expected.
51341	Expiry Date element is expected but not set.
51342	Address Line 1 and/or ZIP Code element are expected but not set.
51346	Previous Settled Amount is set but not expected.
51347	This transaction is not allowed on a debit card.
51348	Request Amount is expected but not set.
51349	EXTENDED_TRAN_TYPE is not set but expected in the usrDef element. EXTENDED_TRAN_TYPE is set in the usrDef element, but it does not have a 4-digit number value.
51350	recurMan is expected but not set.



Code	Description
51351	Voice Auth Code is set but not expected.
51352	Product ID does not exist.
51353	No connection to remote can be established.
51354	Payment Number or Number of Payments is set but not expected.
51355	Payment Number cannot be more than Number of Payments.
51356	Tax Amount is expected but not set.
51357	Tax Amount is set but not expected.
51358	Track 1 Data is invalid (not yet implemented).
51359	recurMan is set but not expected.
51360	For Forced Voice Authorization transactions, either the Transaction Number or both the Datetime and Auth value were set.
51361	The transaction Datetime provided occurs in the future.
51362	Card data was provided when it was not expected.
51363	Merchant ID was provided when it was not expected.
51364	Incomplete Check Details
51365	ACH ID was provided when it was not expected
51366	Managed Settle not allowed for Retail (Industry Code 1)
51367	EMAIL_ADDRESSES in the usrDef element failed validation. Must be a semicolon-separated list of valid email addresses (refer to Contact.email for valid email addresses).
51368	Reversal Response Code flag is set, but the Transaction Code is not 2 (Auth. Reversal) or 6 (Settle Void).
51369	Reversal Response Code flag is set (value 34, Suspect Fraud), but the Industry code is not 0 (Direct Marketing) or 2 (E-commerce)
51370	Initial Recurring Payment Indicator is set but not expected
51371	Tax Indicator is expected for purchase card transactions (Deprecated)
51372	Invalid transaction number (data center ID not valid)
51373	Balance Inquiry must contain track data.
51374	Invalid input type for Balance Inquiry; must be web services.
51375	Security Info element is expected but not set.
51376	CardInputType element is set to a value that is not expected. Values allowed: 1 (EMV Chip), 2 (EMV contactless) or 6 (Dual interface). EMV transactions only allow values 1 (EMV Chip), 2 (EMV contactless) or 6 (Dual interface).



Code	Description
	contactless) or 6 (Dual interface) for cardInputType field.
51377	CardInputType element is set to a value that is not expected. Value 5 (Tokenized) is not allowed. RecurPmt field is present and pmtFreq field does not indicate single payment.
51378	EmvTlvReq element is expected but not set.
51379	Invalid Structured data, there was a problem when it attempts to create TLV object from EmvTlvReq field.
51380	Failed TLV conversion, there was an error when it attempts to convert lcc data from request to TLV object.
51381	Invalid Trancode. Values allowed: 2 (Auth reversal), 6 (settle void) and 13 (credit or return void). Values greater than 0 (for emvDeclinedAfterOnline field) are only allowed for reversal tran codes.
51382	Invalid storeNr. Must be 4 characters.
51383	Invalid termId. Must be 4 characters.

9.4.4 SendTran P2PE Error Response Codes

Code	Description
00	No error
01	DES Fault
02	Illegal Function Code. Either PIN mailing, or Log archiving is not enabled on console
03	Incorrect message length
04	Invalid data in message: Character not in range(0-9,A-F)
05	Invalid key index: Index not defined, key with this Index not stored or incorrect key length
06	Invalid PIN format specifier: only AS/ANSI = 1 & PIN/PAD=3 specified
07	PIN format error: PIN does not comply
08	Verification failure
09	Content of key memory destroyed: e.g. the Luna EFT was tampered or all Keys deleted
0A	Uninitiated key accessed. Key or decimalization table is not stored in the Luna EFT
0B	Checklength Error. Customer PIN length is less than the minimum PVK length
0C	Inconsisted Request Fields: inconsisted field size
0F	Invalid VISA index. Invalid VISA PIN verification key indicator
10	Internal Error
11	Errlog file does not exist
12	Errlog internal error
13	Errlog request length invalid
14	Errlog file number invalid



Code	Description
15	Errlog index number invalid
16	Errlog date tim invalid
17	Errlog before/after flag invalid
19	Unsupported key type
20	Invalid key specifier length
21	Unsupported key specifier
22	Invalid key specifier content
23	Invalid key specifier format
24	Invalid Function Modifier
25	Invalid key attributes
27	Hash process failed
28	Invalid Key Type
29	Unsupported Triple Des Index
30	Invalid administrator signature
32	No adminstration session
33	Invalid file type
34	Invalid signature
35	KKL disabled
36	No PIN pad
37	Pin Pad timeout
39	Public key pair not available
3A	Public key pair generating
3B	RSA cipher error
40	Unsupported HSm stored SEED key
50	Invalid Variant Scheme or Invalid SDF
51	Invalid hash indicator
52	Invalid public key algorithm
53	Public key pair incompatible
54	RSA key length error
60	Software already loaded
61	Software being loaded from CD ROM
62	Software data segment too large
63	Invalid offset value



Code	Description
64	Software loading not initiated
65	Unsupported file id
66	Unsupported control id
67	Software image is being verified
70	Invalid PIN block flag
71	Invalid PIN block random padding
72	Invalid PIN block delimiter
73	Invalid PIN Block RB
74	Invalid PIN Block. Random number invalid
75	Invalid PIN Block RA
76	Invalid PIN Block PIN
77	Invalid PIN Block PIN Length
78	PIN Block format disabled or requested reformatting not allowed
79	Validation data check failed
80	OAEP Decode Error
81	OAEP Invalid Header Byte
82	OAEP Invalid PIN Block
83	OAEP Invalid Random Number
90	General Printer Error
F0	Zero length PIN
91	Invalid Key Block version ID
92	Key Block Key authentication failure
93	Invalid Key Usage
94	Invalid Algorithm
95	Invalid Mode of Use
96	Invalid Version Number
97	Invalid Export Flag
98	Invalid Key Length
99	Invalid Reserve Field
9A	Invalid Number of optional block
9B	Invalid Optional block header
9C	Repeated Optional Block.
9D	Invalid Key Block



Code	Description
9E	Invalid Padding Indicator
9F	Key Translation not permitted
10001	Invalid Request; Incoming P2Pe request is null or empty
10002	Invalid FormatCode; FormatCode field is Null
10003	Invalid FormatCode. FormatCode field failed validation
10004	Invalid KSN. KSN field is Null
10005	Invalid EncryptPAN. EncryptPAN field is Null
10006	Invalid KSN. KSN field failed validation; KSN is non-alphanumeric or length of format code sent is greater than 20
10007	Invalid EncryptPAN. EncryptPAN field failed validation ; Length of EncryptPAN is greater than 256
10010	Invalid Decrypt Data. Decrypt Data field is Null
10011	Invalid Decrypt Data. Decrypt Data field failed validation PAN doesnot contain numbers(0-9) or stars
10012	Any exception when decrypting the encryptPAN

9.4.5 UpdtRecurrProf Error Codes

Code	Description
51400	Customer Data with payments is provided with Existing Customer ID or Payment ID.
51401	Multiple Payments set for Recurring Profile.
51402	The Payment Update Type is set to delete while adding/updating the Recurring Profile. The Payment Update Type is set to update/delete while adding the Customer.
51403	The Customer Company Name is not set.
51404	The Customer ID is not set for the Payments.
51405	The Customer ID is set while adding the customer. The Customer ID was not set while updating/deleting the Customer.
51406	The Recurring profile and Payment Data is set while deleting the customer. The Payment and Customer Data is set while deleting the Recurring Profile.
51407	The Customer Update Type is set to delete while adding/updating the Recurring Profile.
51408	Payment not set while adding the customer for Recurring Profile.
51409	Payment data and Payment ID is set.
51410	Customer.Contact Type is not set.
51411	Customer.Contact Status is not set.
51412	Customer.Contact First name is not set.



Code	Description
51413	Customer.Contact Last Name is expected but not set.
51414	Customer.Contact Address Line 1 is expected but not set.
51415	Customer.Contact City is expected but not set.
51416	Customer.Contact State is expected but not set.
51417	Recurring Profile is not set for add/update of Recurring profile.
51418	The Recurring ID is set while adding the Recurring Profile. The Recurring ID was not set while updating/deleting the Recurring Profile.
51419	Number of Payments Set is less than Number of Payments Processed.
51421	PAN set is incorrect.
51422	Customer ID and Payment ID Provided are not linked.
51424	Prod Data is not set while adding/updating the Product. Prod Data is set while deleting the Product.
51425	Product Update Type set to delete while adding Recurring Profile.
51426	ACH and Card Payment set or both the payments are not set.
51427	The Payment ID is set while adding the Payment. The Payment ID was not set while updating/deleting the Payment.
51428	The bank routing number, bank name, account number, account type, or secc code is not set for ACH Payment.
51429	The Card PAN or Expiry Date is not set.
51430	For Debit Card, the Card Type is not set to Visa or MasterCard.
51431	Payment type is expected but not set.
51432	Date Parse Error.
51433	PAN Encryption failed.
51434	Linked Customer, Payment, and Product to Recurring Profile cannot be deleted.
51435	Adding Product and Recurring or Customer is set.
51436	The Product ID is set while adding the Product. The Product ID was not set while updating/deleting the Product.
51437	The quantity should be set when product is provided for Recurring Profile.
51438	Product Update Type is not set.
51439	Start date cannot be set to a past date. The Recurring Payments Engine is currently busy processing the Recurring Profiles. No changes



Code	Description
	to the start dates are accepted at this time.
51440	Zero amount is not expected.
51441	For Single Payment billing cycle, the number of payments must be set to 1.
51442	Full Name is expected but not set.
51443	The customer is inactive.
51444	User-defined field value is expected but not set.
51445	Amount is expected but not set. (recur.amt is a mandatory element.)
51446	The Security code is not allowed for recurring profiles (recur.seccCode).
51447	The recurring profile is inactive.
51448	New Recurring Profile cannot be added for inactive wallet.
51449	ACH wallet could not be created because the merchant is not setup with a product type of ACH
51450	CardInputType element is set to a value that is not expected. Only value 0 (Normal) is permitted. Attempting to create a wallet using a cardInputType value other than 0 (normal).
51451	CardInputType element is set to tokenized. All card types are accepted for recurring payments except tokenized.
51452	Recurring profile cannot be created for PayPal card type.

9.4.6 Reporting Web Services Error Response Codes

Code	Description
500000	{0} is not in Valid Format
500001	{0} is required
500002	Request can be made against last {0} months
500003	Request can be made for maximum {0} days
500004	From date cannot be higher than To date
500005	Either Merchant Id or Group Id (Only One) must be present
500006	{0} cannot be NULL
500007	{0} exceeds allowed length {1}
500008	{0} is out of range ({1} – {2})
500009	Invalid {0}
500010	Page Size should be less than or equal to {0}



Code	Description
500011	{0} should be a non zero positive number
500012	Invalid Month(MM) : Out of Range (01 – 12)
500013	Invalid Year(YY) : Out of Range (00 – 99)
500014	Invalid Month(MM) : Type Format
500015	Invalid Year(YY) : Type Format
500016	Begin Expiration Date cannot be higher than End Expiration Date
500017	Given Collection ({0}) must have at least one item in it
500018	Given Collection ({0}) has duplicate items in it
500019	Either {0} or {1} Object (Only One) must be present
500020	The Begin Expiration date may be up to {0} months prior to current date
500021	The End Expiration date may be up to {0} months from current date
500022	Settle Transaction Type can only have {0} Transaction Status
500023	To date cannot be into the future
500024	To date cannot be higher than yesterday's date
500025	From date cannot be into the future
500026	Invalid Year : Out of Range (00 – 9999)
500027	Invalid Year : Type Format
500028	Query for future dates are not allowed
500029	Merchant is not configured for ACH
500030	{0} can't be greater than tomorrow's date
600001	Internal System Error
600002	Given Custom Report ({0}) does not exist
600003	Given Custom Report ({0}) is not owned by given merchant/group ({1})
600004	Given Custom Report ({0}) already exist for the given merchant/group ({1})
600005	Invalid Custom Report Column ID
600006	System Error. Please contact Merchant Support.
600007	Merchant / Group not found.
700001	Internal System Error
700002	Internal System Error. Please try again later.



Code	Description
700003	Response data is invalid.
700004	Internal System Error
800001	Given Credentials are not authorize to view requested report
800002	Given Credentials are not authenticated and/or Access Denied

9.4.7 RecurrProfFromTran

Code	Description
52400	The operation is not allowed for the given original transaction. Either the original transaction does not belong to the current merchant, or the original transaction tran code is not 0, 1, 3, 9 or 11.
52401	Original transaction not found.
52402	Unable to retrieve original transaction.
52403	Original transaction does not contain sufficient information.
52404	Failed to create customer wallet. Check event log.
52405	Failed to create customer contact. Check event log.
52406	Original transaction did not contain contact details. (This error code will no longer be used)
52407	The operation is not allowed for Pay pal transaction.

9.4.8 Web Page Error Codes

Note: These error codes are standard web page error codes and it is best practice to program your environment to handle them.

Code	Description
100	Continue
101	Switching Protocols
200	OK
201	Created
202	Accepted
203	Partial Information
204	No Content
205	Reset Content
206	Partial Content
300	Multiple Choices
301	Moved Permanently
302	Moved Temporarily
303	See Other



304	Not Modified
305	Use Proxy
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required
408	Request Time-Out
409	Conflict
410	Gone
411	Length Required
412	Precondition Failed
413	Request Entity Too Large
414	Request-URL Too Large
415	Unsupported Media Type
500	Server Error
501	Not Implemented
502	Bad Gateway
503	Out of Resources
504	Gateway Time-Out
505	HTTP Version not supported

9.5 Transaction Status

9.5.1 Credit Card Status

Code	Description
Approved	This transaction has been authorized.
ApprovedMarkedForSettlement	This transaction is authorized and has been marked for settlement.
ApprovedNotSettled	This transaction has been authorized and waiting to be captured for settlement.



Declined	This transaction has not been authorized.
Declined – Response Code Monitoring	This transaction has not been authorized due to Response Code Monitoring.
Settlement in Progress	This transaction is in the process of being extracted for settlement.
Refunded	This transaction has been Refunded.
Settled	This transaction has been closed and merchant has been paid/funded.
Voided	This transaction has been voided/cancelled.
VoidedOrReversedAuthorization	This transaction has been voided/cancelled and/or an authorization reversal has been sent to the issuing bank.

9.5.2 ACH Status

Code	Description
BOException	Transaction was declined by Check Gateway's back-office validation
Cancelled	Transaction was cancelled by the merchant
ChargeBack	Transaction was returned (cancelled) by the consumer
Credit	Credit/Refund was accepted by Check Gateway and awaits origination
Credit Downloaded	Credit/Refund is being prepared for origination by Check Gateway's back-office
Credit Funded	Merchant has been debited for the transaction.
Credit Originated	Credit/Refund was sent to the FED
Credit Return	Credit/Refund was returned (cancelled) by the bank
Declined	Consumer verification was negative for the transaction
Declined Downloaded	Consumer Verification was negative for the transaction
Downloaded	Transaction is being prepared for origination by Check Gateway's back office
Funded	Merchant has been paid/funded for the transaction
Incomplete	Transaction was saved in the database but remains in an incomplete state; transactions remain in this status for 1 second



Invalid	Transaction was returned (cancelled) by the bank
NSF	Transaction was returned by the bank due to insufficient funds
Originated	Transaction was sent to the FED
Processed	Transaction was accepted by Check Gateway and awaits origination
Refund	Transaction was refunded by the merchant
Returned	Transaction was returned (cancelled) by the bank

Note: ACH Status Updates are performed every day at 10:00 PM and 2:30 AM PST.

9.6 Batch Status Codes

Code	Description
00	Batch was processed successfully
01	Batch header was invalid
02	Batch trailer was invalid
03	A body record failed processing
04	Batch file failed processing
05	Batch file move failed (I/O Error)
06	File was inaccessible or missing (I/O Error)
07	Batch failed totals validation
08	Duplicate batch was found
09	General system failure
10	Merchant ID in batch header mismatched merchant ID in account
11	Batch ID in batch header mismatched batch ID in account

9.7 Batch XML Error Tag

Code	Description
52300	Unexpected XML Validation Error
52300	Validation Error
52300	Service Exception

Example:

```
1: <?xml version="1.0" encoding="UTF-8"?><BaseFaultType
 xmlns:ns2="http://postilion/realtme/portal/soa/xsd/Faults/2009/01"><ns2:name>Batch
 Record Fault</ns2:name><ns2:message>Service Exception: Service Exception:
 51422</ns2:message><ns2:errorCode>52300</ns2:errorCode></BaseFaultType>
```



9.8 Transaction Response Codes

Code	Description
For various reasons, such as card brand/Association, description may vary per response code. Note: All response codes in bold are approved/authorized responses.	
00	Approved or completed successfully
01	Refer to card issuer
02	Refer to card issuer, special condition
03	Invalid merchant
04	Pick-up card
05	Do not honor
06	Error
07	Pick-up card, special condition
08	Declined: Honor with identification (this is a decline response when a card not present transaction)
09	Request in progress
10	Approved, partial authorization
11	Declined: VIP (this is a decline response for a card not present transaction)
12	Invalid transaction
13	Invalid amount
14	Invalid card number
15	No such issuer
16	Declined: update track 3
17	Customer cancellation
18	Customer dispute
19	Re-enter transaction
20	Invalid response
21	No action taken
22	Suspected malfunction
23	Unacceptable transaction fee
24	File update not supported
25	Unable to locate record
26	Duplicate record
27	File update field edit error
28	File update file locked
29	File update failed



30	Format error
31	Bank not supported
33	Expired card, pick-up
34	Suspected fraud, pick-up
35	Contact acquirer, pick-up
36	Restricted card, pick-up
37	Call acquirer security, pick-up
38	PIN tries exceeded, pick-up
39	No credit account
40	Function not supported
41	Lost card, pick-up
42	No universal account
43	Stolen card, pick-up
44	No investment account
45	Account closed
46	Identification required
47	Identification cross-check required
48	No customer record
49	Reserved for future Realtime use
50	Reserved for future Realtime use
51	Not sufficient funds
52	No checking account
53	No savings account
54	Expired card
55	Incorrect PIN
56	No card record
57	Transaction not permitted to cardholder
58	Transaction not permitted on terminal
59	Suspected fraud
60	Contact acquirer
61	Exceeds withdrawal limit
62	Restricted card
63	Security violation
64	Original amount incorrect
65	Exceeds withdrawal frequency



66	Call acquirer security
67	Hard capture
68	Response received too late
69	Advice received too late (the response from a request was received too late)
70	Reserved for future use
71	Reserved for future Realtime use
72	Reserved for future Realtime use
73	Reserved for future Realtime use
74	Reserved for future Realtime use
75	PIN tries exceeded
76	Reversal: Unable to locate previous message (no match on Retrieval Reference Number)/ Reserved for future Realtime use
77	Previous message located for a repeat or reversal, but repeat or reversal data is inconsistent with original message/ Intervene, bank approval required
78	Invalid/non-existent account – Decline (MasterCard specific)/ Intervene, bank approval required for partial amount
79	Already reversed (by Switch)/ Reserved for client-specific use (declined)
80	No financial Impact (Reserved for declined debit)/ Reserved for client-specific use (declined)
81	PIN cryptographic error found by the Visa security module during PIN decryption/ Reserved for client-specific use (declined)
82	Incorrect CVV/ Reserved for client-specific use (declined)
83	Unable to verify PIN/ Reserved for client-specific use (declined)
84	Invalid Authorization Life Cycle – Decline (MasterCard) or Duplicate Transaction Detected (Visa)/ Reserved for client-specific use (declined)
85	No reason to decline a request for Account Number Verification or Address Verification/ Reserved for client-specific use (declined)
86	Cannot verify PIN/ Reserved for client-specific use (declined)
87	Reserved for client-specific use (declined)
88	Reserved for client-specific use (declined)
89	Reserved for client-specific use (declined)
90	Cut-off in progress
91	Issuer or switch inoperative
92	Routing error
93	Violation of law
94	Duplicate Transmission (Integrated Debit and MasterCard)
95	Reconcile error
96	System malfunction



97	Reserved for future Realtime use
98	Exceeds cash limit
99	Reserved for future Realtime use
1106	<i>Reserved for future Realtime use</i>
0A	Reserved for future Realtime use
A0	Reserved for future Realtime use
A1	ATC not incremented
A2	ATC limit exceeded
A3	ATC configuration error
A4	CVR check failure
A5	CVR configuration error
A6	TVR check failure
A7	TVR configuration error
A8 to BZ	Reserved for future Realtime use
B1	Surcharge amount not permitted on Visa cards or EBT Food Stamps/ Reserved for future Realtime use
B2	Surcharge amount not supported by debit network issuer/ Reserved for future Realtime use
C0	Unacceptable PIN
C1	PIN Change failed
C2	PIN Unblock failed
C3 to D0	Reserved for future Realtime use
D1	MAC Error
D2 to E0	Reserved for future Realtime use
E1	Prepay error
E2 to MZ	Reserved for future Realtime use
N1	Network Error within the TXP platform
N0 to ZZ	Reserved for client-specific use (declined) (except N1)
N0	Force STIP/ Reserved for client-specific use (declined)
N3	Cash service not available/ Reserved for client-specific use (declined)
N4	Cash request exceeds Issuer limit/ Reserved for client-specific use (declined)
N5	Ineligible for re-submission/ Reserved for client-specific use (declined)
N7	Decline for CVV2 failure/ Reserved for client-specific use (declined)
N8	Transaction amount exceeds preauthorized approval amount/ Reserved for client-specific use (declined)
P0	Approved; PVID code is missing, invalid, or has expired



P1	Declined; PVID code is missing, invalid, or has expired/ Reserved for client-specific use (declined)
P2	Invalid biller Information/ Reserved for client-specific use (declined)/ Reserved for client-specific use (declined)
R0	The transaction was declined or returned, because the cardholder requested that payment of a specific recurring or installment payment transaction be stopped/ Reserved for client-specific use (declined)
R1	The transaction was declined or returned, because the cardholder requested that payment of all recurring or installment payment transactions for a specific merchant account be stopped/ Reserved for client-specific use (declined)
Q1	Card Authentication failed/ Reserved for client-specific use (declined)
XA	Forward to Issuer/ Reserved for client-specific use (declined)
XD	Forward to Issuer/ Reserved for client-specific use (declined)



9.9 Extended Response Codes

Ext. Code	Standard Response Code	Description
A400	00	Approved Post – Re-auth attempt approved and settled
A401	00	Approved Post – Reversal approved by NID
A402	00	Approved Post – Reversal enqueued by NID. The reversal has been accepted, and it will be sent when the Active/Active partner becomes available. There is no financial impact until the reversal has been pulled out of the queue. A reversal is not guaranteed to occur when the Active/Active partner becomes available. However, any financial discrepancy is found through reconciliation.
B3AR	05	AVS Required/Address Information Not Provided
B3BR	05	AVS and CVV2 Required/Information Not Provided
B3CR	05	CVV2 Required /CVV2 Not Provided
B3DB	05	AVS and CVV2 Response Code Declined
B400	Any soft decline code	Declined Post – Re-auth attempt declined and original auth settled
B401	Any soft decline code	Declined Post – Re-auth attempt declined and settle amount greater than auth amount
B402	Any soft decline code	Declined Post – Re-auth attempt declined and settle amount less than auth amount
B403	Any soft decline code	Declined Post – Re-auth attempt declined and original auth expired
B404	03	Declined Post – Merchant closed
B405	12	Declined Post – Invalid input type for this merchant
B406	12	Declined Post – Invalid transaction type for this merchant
B407	12	Declined Post – Invalid product type for this merchant
B408	12	Declined Post – Auth and settle amounts differ and merchant not configured for managed services
B410	12	Decline – Merchant does not have permission to resubmit MC transaction
B411	12	Transaction has been processed.
B412	12	Transaction not allowed.
B413	12	Invalid Card Type for Card Input Type.
B414	12	Auth amount and settle amount must be equal.
B40A	05	Declined Post – Bad AVS result
B40B	05	Declined Post – Bad CVV result
B40C	03	Declined Post – Merchant's closed date has passed, merchant forced closed
B40D	Any response code except a soft decline code	Declined Post – Re-Auth Resulted in Hard Decline



Ext. Code	Standard Response Code	Description
B40E	03	Declined Post – Merchant suspended
B40F	12	Declined Post – Invalid transaction linking
B40G	12	Declined Post – Original transaction already linked
B40H	12	Declined Post – Original transaction not found
B40I	12	Declined Post – Original transaction declined
B40J	12	Declined Post – Invalid merchant ID in linked transaction
B40K	12	Declined Post – Credit linked to unextracted settle transaction
B40L	12	Declined Post – Auth resubmission linked to approved auth
B40M	03	Declined Post – Merchant not configured
B40N	12	Declined Post – Card type sent in message did not match card type derived from routing information
B40P	12	Declined Post – Card security code length invalid for the card type
B40Q	12	Magnetic stripe invalid for the industry code
B40R	12	The refund amount exceeded the transaction amount.
B40S	12	The void/reversal is linked to an extracted transaction.
B40T	12	No account information could be found for this transaction.
B40U	12	revAuthOnVoid cannot be set for this Transaction Type.
B40V	12	The Original Auth is expired.
B40W	05	Incompatible Industry Code for Cardholder Authentication
B40X	05	Inconsistent Cardholder Authentication Data
B40Y	30	RPE transaction could not be processed.
B40Z	12	User Defined Field is not configured for the Merchant.
B500	30	EMV Tag DF78 is missing
B501	30	EMV Tag DF79 is missing



9.10 Partial Authorization Response Table

Response Field for Partial Authorization	Type	List of values returned and description
accountType	n2	<p>This specifies the Account Type of this Additional Amount.</p> <p>Valid values:</p> <p>00 = Default/Unspecified 08-09 = Default – reserved for client-specific use 10 = Savings - default 11 = Savings – money market 12 = Savings – certificate of deposit 18-19 = Savings – reserved for client-specific use 20 = Check/Cheque - default 21 = Check/Cheque – money market 28-29 = Check/Cheque – reserved for client-specific use 30 = Credit – default 31 = Credit – line of credit 32 = Credit – installment loan 33 = Credit – mortgage loan 34 = Credit – home equity loan 35 = Credit – commercial loan 39 = Credit – reserved for client-specific use 40 = Universal – default 48-49 = Universal – reserved for client-specific use 50 = Investment – default 51 = Investment – stock or bond 52 = Investment – retirement account 53 = Investment – revolving loan account 58-59 = Investment – reserved for client-specific use 60 = Electronic purse - default 67-69 = Electronic purse – reserved for client-specific use 70 = Gift / Stored value card – default 71 = Gift / Stored value card – single deposit, single use 72 = Gift / Stored value card – single deposit, multi-use 73 = Gift / Stored value card – multi-deposit, multi-use 91 = Mortgage loan (deprecated, use account type 33) 92 = Installment loan (deprecated, use account type 32)</p> <p>Note:</p> <p>This element must have leading zeroes to fill the length of this element. For example, 1 must be specified as 01.</p>



Response Field for Partial Authorization	Type	List of values returned and description
amountType	an2	<p>This specifies the Amount Type of this Additional Amount.</p> <p>Valid values:</p> <p>01 = Ledger balance 02 = Available balance 20 = Remaining this cycle 40 = Cash 53 = Approved 90 = Available credit 91 = Credit limit</p> <p>The following values are supported in messages coming from TSYS Saratoga (in addition to the above):</p> <p>00 = Payment Transactions 05 = Amex Prepaid Card available amount remaining 57 = Original Amount 3S = Healthcare Amount Co-payment 4S = Amount Healthcare 4T = Amount Transit 4U = Amount Prescription/Rx 4V = Amount Vision/Optical 4W = Amount clinic/other qualified medical 4X = Amount Dental 80 = Amount cash over 81 = Original Amount Cash Over</p> <p>Note: This element must have leading zeroes to fill the length of this element. For example, 1 must be specified as 01.</p>
AmtDueRemaining	n..8	This is the remaining amount due for the transaction when using a prepaid/gift card/partial authorization.

9.11 Web Services Response Data Definition

Code	Description
rspCode	This is the transaction response code. A value of 00 indicates success for a full authorization. A value of 10 indicates success for a partial authorization.
secRslt	This indicates the CVV2/CVC2/CID results code from the auth response.
avsRslt	This is the address verification service result code.
aci	For TSYS Use Only.
tranId	For TSYS Use Only.
valCode	For TSYS Use Only.
comCardType	This identifies the transaction as a corporate, business, purchase or prepaid card.



swchKey	For TSYS Use Only.
tranNr	This is the reference number supplied by the system retaining the original source information and used to assist in locating the transaction and complete any follow up actions. Ex: void, refund.
dtTm	This is the recorded date and time the transaction was posted to the gateway.
amt	This is the transaction amount.
stan	For TSYS Use Only.
auth	This is the authorization code received from the issuer when the transaction is approved.
cardType	This is the credit card type. Ex: 0=Visa, 1=MC, 2=AX, 3=D,I 4=DC, 5=JCB and 6=PayPal
mapCaid	For TSYS Use Only.
accountType	This specifies the Account Type of this Additional Amount. See partial auth table in appendix section. *
amountType	This specifies the Amount Type of this Additional Amount. See partial auth table in appendix section. *
currencyCode	This specifies the Currency Code of this Additional Amount. The only value returned is 840 for US Currency. *
amountSign	This specifies the Amount Sign of this Additional Amount. The only value returned is D for debit. *
amount	This specifies the original Amount of this Additional Amount in minor denominations. *
CardBalance	This is the card balance for the transaction when using a prepaid/gift card.
extRspCode	This is the extended response code. This is returned as a secondary response for certain transactions. Typically start with a B or A.
cavvRsIt	1-digit code indicating the results of a CAVV request in the authorization See Card Authentication appendix for result code definition. Value returned only for Visa transactions sent with Cardholder Authentication data

* Applies to Partial Authorization Only



9.12 Hosted Response Data Definition

Code	Description
rspCode	This is the transaction response code. A value of 00 indicates success for a full authorization. A value of 10 indicates success for a partial authorization.
tranNr	This is the reference number supplied by the system retaining the original source information and used to assist in locating the transaction and complete any follow up actions. Ex: void, refund.
auth	This is the authorization code received from the issuer when the transaction is approved.
Date	Date and time of transaction
Amount	Transaction Amount
PmtType	Payment type used for transaction
AccountHoldername	Name of account holder
CustomerReferenceID	Value provided in the original transaction request, we return with response. This value is at the transaction level and stored with transaction or wallet. You can reference this value when searching transaction.
AddressLine1	Account Holder Billing Address Line 1
AddressLine2	Account Holder Billing Address Line 2
City	Account Holder City
State	Account Holder State
Zip	Account Holder Zip
Email	Email used/passed with the transaction or customer profile
Phone	Phone number used/passed with the transaction or customer profile
cardType	This is the credit card type. Ex: 0=Visa, 1=MC, 2=AX, 3=DI, 4=DC, 5=JCB and 6=PayPal
IndCode	Industry code used/passed with the transaction, numeric. (0- MOTO 1- Retail 2- eCommerce)
CustID	Customer identifier, 20 digits, numeric
PmtID	Wallet identifier, 20 digits, numeric. Associated to a specific customer.
AddlAmount	This specifies the original Amount of this Additional Amount in minor denominations. *
AmountType	This specifies the Amount Type of this Additional Amount. See partial auth table in appendix section.*
AmtDueRemaining	This is the remaining amount due for the transaction when using a prepaid/gift card.*
CardBalance	This is the card balance for the transaction when using a prepaid/gift card.*
AVSCode	This is the address verification service result code.
SecRslt	This indicates the CVV2/CVC2/CID results code from the auth response.
extRspCode	This is the extended response code. This is returned as a secondary response for certain transactions. Typically start with a B or A.

* Applies to Partial Authorization Only



9.13 POST Response Data Definition

Code	Description
ResponseCode	This is the transaction response code. A value of 00 indicates success for a full authorization. A value of 10 indicates success for a partial authorization.
tranNr	This is the reference number supplied by the system retaining the original source information and used to assist in locating the transaction and complete any follow up actions. Ex: void, refund.
Auth	This is the authorization code received from the issuer when the transaction is approved.
PostDate	Date and time of transaction. EX: 2014-03-03T07:54:33.000
Amount	Transaction Amount
AVSCode	This is the address verification service result code.
CVV2ResponseCode	This indicates the CVV2/CVC2/CID results code from the auth response.
AmtDueRemaining	This is the remaining amount due for the transaction when using a prepaid/gift card.*
CardBalance	This is the card balance for the transaction when using a prepaid/gift card.*
CAVVResultCode	1-digit code indicating the results of a CAVV request in the authorization See Card Authentication appendix for result code definition. Value returned only for Visa transactions sent with Cardholder Authentication data

* Applies to Partial Authorization Only



9.14 Address Verification Service (AVS) Response Codes

Code	Description	Visa, Discover, JCB, PayPal	MasterCard	Amex
A	The street addresses match; the postal codes do not match, or the request does not include the postal code.	Y	Y	Y
B	The street addresses match; the postal code was not verified due to incompatible formats. (Acquirer sent both street address and postal codes.)	Y	N	N
C	Street Address and postal code not verified due to incompatible formats. (Acquirer sent both street address and postal codes.)	Y	N	N
D	Street address and postal codes match for international transaction.	Y	N	N
F	Street address and postal code match. (U.K.only)	Y	N	N
G	Address information is not verified for international transaction	Y	N	N
I	Address information not verified.	Y	N	N
M	Street address and postal codes match for international transaction.	Y	N	N
N	No match. Acquirer sent postal/ZIP code only, or street address only, or both postal code and street address	Y	Y	Y
P	Postal code match. Acquirer sent both postal code and street address, but street address is not verified due to incompatible formats	Y	N	N
R	Retry. System unavailable or timed out. Issuer ordinarily performs its own AVS but is unavailable. Available for US issuers only	Y	Y	Y
S	Service not supported.	N	Y	Y
U	Address not verified for domestic transactions. No AVS information is available on record.	Y	Y	Y
W	For US addresses, nine-character numeric postal code matches, but address does not match. For address outside the US, postal codes matches but address does not	N	Y	N
X	For US address, nine-character numeric postal code and address match. For addresses outside the US, postal code and address match.	N	Y	N
Y	Address and five digit Zip match.	Y	Y	Y
Z	Postal/ZIP matches, street address does not match or street address not included in request	Y	Y	Y
1	Cardholder name and ZIP match	N	N	Y
2	Cardholder name, address, and ZIP match	N	N	Y



Code	Description	Visa, Discover, JCB, PayPal	MasterCard	Amex
3	Cardholder name and address match	N	N	Y
4	Cardholder name match	N	N	Y
5	Cardholder name incorrect, ZIP matches	N	N	Y
6	Cardholder name incorrect, address and ZIP match	N	N	Y
7	Cardholder name incorrect, address matches	N	N	Y
8	Cardholder, all do not match	N	N	Y

9.15 Card Verification (CVV2/CVC2) Response Codes

Code	Description
M	CVV2 / CVC2/CID Match
N	CVV2 / CVC2/CID No Match (Does not match the value assigned by the issuer.)
P	Not Processed (The Issuer is certified, but the CVV2 ID was not processed by the Issuer.)
S	The CVV2/CVC2/CID should be on the card, but the merchant indicates it is not.
U	Not Certified (Issuer is not certified and/or has not provided Visa encryption keys.)



9.16 ACH Transaction Status Codes

Response Code	Description	Response Action
00	Processed/Accepted	Transaction was accepted by Check Gateway and awaits Origination
01	Originated	Transaction was sent to the FED
02	Funded	Merchant has been paid for the transaction
03	Returned	Transaction was returned (cancelled) by the bank
04	NSF	Insufficient funds; transaction was returned (cancelled) by the bank
05	Chargeback	Transaction was returned (cancelled) by the consumer
06	Invalid	Transaction was returned (cancelled) by the bank
07	Declined	Consumer verification was negative for the transaction
08	Refund	Transaction was refunded by the merchant
09	Credit	Transaction was accepted by Check Gateway and awaits Origination
10	Incomplete	Transaction was saved in the database, but remains in an incomplete state; transactions should only remain in this status for 1 second
11	Cancelled	Transaction was cancelled by the merchant
12	BO Exception	Transaction was declined by Back-Office validation
13	Downloaded	Transaction is being prepared for Origination by the Back-Office
14	Credit Originated	Transaction was sent to the FED
15	Credit Downloaded	Transaction is being prepared for Origination by the Back-Office
16	Credit Return	Transaction was returned (cancelled) by the bank
17	Credit Funded	Merchant has been paid for the transaction
18	Declined Downloaded	Consumer verification was negative for the transaction
88	Authentication	Positive response from the authorization API (not a true transaction status)



9.17 ACH Response Codes

Response Code	Description
00	Transaction Processed
00	Transaction refunded.
00	Credit Processed.
06	Bank routing number and account number are required.
06	Bank routing number validation negative (ABA).
06	Bank routing number validation negative (district).
06	Connection reset
06	Connection refused
06	Consumer name cannot be more than 50 characters.
06	Consumer verification negative.
06	Internal connection fatal error.
06	Invalid Status Code 500
06	javax.xml.bind.UnmarshalException: unexpected element (uri:"", local:"Exception"). Expected elements are <{}Notes>,<{}Message>
06	MerchantLogin_Auth returned 0 tables instead of 1. (F=1)
06	Only Debit transactions may be refunded.
06	peer not authenticated
06	Phone number area/exchange code is invalid.
06	Read timed out
06	SEC Code is not configured for submission on this account.
06	There is already an open DataReader associated with this Command which must be closed first.
06	Threshold exceeded: Accounts Per Consumer Max
06	Threshold exceeded: Single Transaction Amount Max
06	Transaction (Process ID xx) was deadlocked on lock resources with another process and has been chosen as the deadlock victim. Rerun the transaction.
06	You don't have access to submit an ACH Refund.
06	Unable to Complete Transaction (The target server failed to respond)
06	ZIP code must be 5 or 9 digits



06	Connection to https://TF1.CheckGateway.com refused
06	User Name not found in MerchantLogin
12	Bank routing number and account number are required.
12	Connection reset
12	Connection refused
12	Consumer name cannot be more than 50 characters.
12	Consumer verification negative.
12	Internal connection fatal error.
12	Invalid Status Code 500
12	javax.xml.bind.UnmarshalException: unexpected element (uri:"", local:"Exception"). Expected elements are <{}Notes>,<{}Message>
12	Only Debit transactions may be refunded.
12	peer not authenticated
12	Phone number area/exchange code is invalid.
12	Read timed out
12	SEC Code is not configured for submission on this account.
12	There is already an open DataReader associated with this Command which must be closed first.
12	Threshold exceeded: Accounts Per Consumer Max
12	Threshold exceeded: Single Transaction Amount Max
12	Transaction (Process ID xx) was deadlocked on lock resources with another process and has been chosen as the deadlock victim. Rerun the transaction.
12	You don't have access to submit an ACH Refund.
12	Unable to Complete Transaction (The target server failed to respond)



9.18 ACH Return Reason Codes

The following table contains the description for ACH return codes. These codes and their respective responses originate from the issuing bank therefore identified as a bank reject/decline.

Code	Meaning	Notes
R01	Insufficient Funds (NSF)	
R02	Account Closed	
R03	No Account / Unable to Locate Account	
R04	Invalid Account Number	
R05	Unauthorized Debit to Consumer Account Using Corporate SEC Code	1
R06	Returned per ODFI's Request	2
R07	Authorization Revoked by Consumer	1
R08	Payment Stopped	
R09	Uncollected Funds	
R10	Customer Advises Not Authorized, Notice Not Provided, Improper Source Document, or Amount of Entry Not Accurately Obtained from Source Document	1
R11	Check Truncation Entry Return	
R12	Account Sold to Another DFI	
R13	Invalid ACH Routing Number (formerly: RDFI Not Qualified to Participate)	
R14	Representative Payee Deceased or Unable to Continue in that Capacity	
R15	Beneficiary or Account Holder (Other Than a Representative Payee) Deceased	
R16	Account Frozen	
R17	File Record Edit Criteria	
R18	Improper Effective Entry Date	
R19	Amount Field Error	
R20	Non-Transaction Account	
R21	Invalid Company Identification	
R22	Invalid Individual ID Number	
R23	Credit Entry Refused by Receiver	
R24	Duplicate Entry	
R25	Addenda Error	
R26	Mandatory Field Error	
R27	Trace Number Error	
R28	Routing Number Check Digit Error	
R29	Corporate Customer Advises Not Authorized	1
R30	RDFI Not Participant in Check Truncation Program	
R31	Permissible Return Entry	



Code	Meaning	Notes
R32	RDFI Non-Settlement	
R33	Return of XCK Entry	
R34	Limited Participation DFI	
R35	Return of Improper Debit Entry	
R36	Return of Improper Credit Entry	
R37	Source Document Presented for Payment	
R38	Stop Payment on Source Document	
R39	Improper Source Document	
R40	Return of ENR Entry by Federal Government Agency (ENR only)	
R41	Invalid Transaction Code (ENR only)	
R42	Routing Number / Check Digit Error (ERN only)	
R43	Invalid DFI Account Number (ENR only)	
R44	Invalid Individual ID Number / Identification Number (ENR only)	
R45	Invalid Individual Name / Company Name (ENR only)	
R46	Invalid Representative Payee Indicator (ENR only)	
R47	Duplicate Enrollment (ENR only)	
R50	State Law Affecting RCK Acceptance	
R51	Item is Ineligible, Notice Not Provided, Signature Not Genuine, Item Altered, or Amount of Entry Not Accurately Obtained from Item	1
R52	Stop Payment on Item	
R53	Item and ACH Entry Presented for Payment	
R61	Misrouted Return	3
R62	Incorrect Trace Number	
R63	Incorrect Dollar Amount	
R64	Incorrect Individual Identification	
R65	Incorrect Transaction Code	
R66	Incorrect Company Identification	
R67	Duplicate Return	3
R68	Untimely Return	3
R69	Multiple Errors	3
R70	Permissible Return Entry Not Accepted	3
R71	Misrouted Dishonored Return	4
R72	Untimely Dishonored Return	4
R73	Timely Original Return	4
R74	Corrected Return	4
R75	Original Return Not a Duplicate	4
R76	No Errors Found	4



Code	Meaning	Notes
R80	Cross-Border Payment Coding Error	
R81	Non-Participant in Cross-Border Program	
R82	Invalid Foreign Receiving DFI Identification	
R83	Foreign Receiving DFI Unable to Settle	
R84	Entry Not Processed by OGO	
R99	Check21	

¹ High Risk: considered **Unauthorized** by NACHA, and considered the payment processor.

² Considered a **ChargeBack** by the payment processor.

³ Dishonored Return code

⁴ Contested Dishonored / Corrected Return Entry code

9.19 ACH Back Office Exception Codes

The following table contains the description for the back office exception codes. These codes and their respective responses originate from the transaction express gateway therefore identified as a gateway reject/decline.

BO Exception	Meaning
B0	Originated
B1	Routing Number Failed Check Digit Validation
B10	Name is Invalid
B13	Account Type is Missing
B14	Account Type is Invalid
B15	Company Code is Invalid
B21	Credit Transaction for WEB or TEL SEC Code
B22	SEC Code is Invalid
B23	FH_Template_ID is Missing or Invalid
B51	Dollars Daily Max Threshold Exceeded
B52	Dollars Monthly Max Threshold Exceeded
B53	Transactions Daily Max Threshold Exceeded
B54	Transactions Monthly Max Threshold Exceeded
B55	Dollars Daily per Consumer Max Threshold Exceeded
B61	Duplicate Entry
B63	Company is Suspended
B64	Bank Account Blocked (ChargeBack)
B65	Bank Account Blocked (NOC)
B66	Company is Terminated
B67	Credit Reserve Balance Exceeded
B69	ORAC
B75	Merchant Requested Manual Cancel
B81	Selected for Random Telephone Inquiry



BO Exception	Meaning
B82	Selected for Random Email Inquiry
B90	MyECheck: address is invalid
B91	MyECheck: RDFI is missing in RoutingNumbers table
B95	Declined on the Web
B96	Consumer Requested Block
B97	RDFI Stopped
B99	Unvalidated

9.20 ACH NOC (Notification of Change) Codes

Code	Meaning
C01	Incorrect DFI Account Number
C02	Incorrect Routing Number
C03	Incorrect Routing Number and Incorrect DFI Account Number
C04	Incorrect Individual Name / Receiving Company Name
C05	Incorrect Transaction Code
C06	Incorrect DFI Account Number and Incorrect Transaction Code
C07	Incorrect Routing Number, Incorrect DFI Account Number, and Incorrect Transaction Code
C08	Incorrect Foreign Receiving DFI Identification
C09	Incorrect Individual Identification Number
C10	Incorrect Company Name
C11	Incorrect Company Identification
C12	Incorrect Company Name and Incorrect Company Identification
C13	Addenda Format Error



9.21 ACH Fraud Check Values

Fraud Check Response Fields:

Fraud Check Response Fields	
Element	Description
Message: Transaction processed	Check Gateway transaction status
Note: PrevPay: nil +0	Previous Payments Score
Note: LexisNexis Invalid Address: : Address does not match -25, Phone Ok: : Phone match found +25	Lexis Nexis Score Variables
Note: Score: 149/100	Lexis Nexis Score
Example of score related to each variable. Address: +25 – Match to name Phone: +0 – No information found DOB: -25 – date does not match to record Transaction Final Score: 0 (+25 +0 -25 = pass)	

All elements outlined in the table below are mandatory for WEB, TEL, CCD and PPD.

SECC Value is WEB & TEL			
Element	Type	Description	M
contact.fullName	ans..61	The customer's full name	M
achEcheck.bankRtNr	n9	This is the routing number of the customer's bank. Note: If the routing number indicates a Government, Electronic, and Traveler's Check account, it will not be honored.	M
achEcheck.acctNr	ans..28	This is the customer's checking/savings account number. Note: While the Type has a length of 28, the account number must be within the range of 3 to 17 significant digits. The transaction is declined otherwise.	M
achEcheck.acctType	n1	Type of customer account. Valid Values: <ul style="list-style-type: none">• 0 = Checking• 1 = Savings Note: This element defaults to 0 = Checking.	M

**SECC Value is WEB & TEL**

reqAmt	n..8	This contains the amount associated with this transaction in minor denominations. Conditions: <ul style="list-style-type: none">• No special characters are allowed.• A leading zero is required.	M
--------	------	---	---

DO NOT COPY



All elements outlined in the following table are mandatory for WEB and TEL. Note: In order to validate these additional fields, Enhanced Fraud Service is required to be enabled on the account.

SECC Value is WEB & TEL			
Element	Type	Description	M
contact.fullName	ans..61	The customer's full name	M
**phone.nr	ans..12	This is the customer's phone number.	M
contact.addrLn1	ans..50	This is the customer's street address line1.	M
contact.city	ans..40	This is the customer's city.	M
contact.state	a2	This is the customer's state. Values must be in all CAPS.	M
contact.zipCode	ans..9	This is the customer's ZIP code.	M

**The NANP (ACH Phone number) number format can be summarized in the notation NPA-NXX-xxxx.

Component	Name	Number ranges	Notes
NPA	Numbering Plan Area Code	Allowed ranges: [2–9] for the first digit, and [0–9] for the second and third digits. When the second and third digits of an area code are the same, that code is called an easily recognizable code (ERC). ERCs designate special services; e.g., 888 for toll-free service. The NANP is not assigning area codes with 9 as the second digit.[10]	Covers Canada, the United States, parts of the Caribbean Sea, and some Atlantic and Pacific islands. The area code is often enclosed in parentheses.
NXX	Central Office (exchange) code	Allowed ranges: [2–9] for the first digit, and [0–9] for both the second and third digits (however, the third digit cannot be "1" if the second digit is also "1").	Often considered part of a subscriber number. The three-digit Central Office codes are assigned to a specific CO serving its customers, but may be physically dispersed by redirection, or forwarding to mobile operators and other services.
xxxx	Subscriber Number	[0–9] for each of the four digits.	This unique four-digit number is the subscriber number or station code.

For example:

234-235-5678 is valid

234-911-5678 is invalid, because the exchange code cannot be in the form N11.

123-234-5678 is invalid, because NPA cannot begin with 0 or 1



9.22 Soft Descriptor Format Requirements (approval required before use)

Field Name	Length	Type	Data Requirements and Formats																														
PaymentDesc	25	Alpha-numeric	<p>The PaymentDesc field contains an alternate “Doing Business As” (DBA) name of the merchant’s business and should be a name most recognizable to a cardholder. The PaymentDesc field must not be used as a transaction description field in lieu of the required, recognizable DBA name.</p> <p>The PaymentDesc field may contain additional information such as merchandise description, order number, reference number, or other information that will further identify the transaction and assist cardholder recognition. If additional information is used, the PaymentDesc field must conform to one of the following formats:</p> <p>Formats: *</p> <table><thead><tr><th></th><th><i>Field Position</i></th><th><i>Data</i></th></tr></thead><tbody><tr><td>Option 1:</td><td>Pos. 1-3</td><td>Merchant name or abbreviation</td></tr><tr><td></td><td>Pos. 4:</td><td>Asterisk (*)</td></tr><tr><td></td><td>Pos. 5-25</td><td>Descriptive Information</td></tr><tr><td>Option 2:</td><td>Pos. 1-7</td><td>Merchant name or abbreviation</td></tr><tr><td></td><td>Pos. 8:</td><td>Asterisk (*)</td></tr><tr><td></td><td>Pos. 9-25</td><td>Descriptive Information</td></tr><tr><td>Option 3:</td><td>Pos. 1-12</td><td>Merchant name or abbreviation</td></tr><tr><td></td><td>Pos. 13:</td><td>Asterisk (*)</td></tr><tr><td></td><td>Pos. 14-25</td><td>Descriptive Information</td></tr></tbody></table> <p>If the transaction represents an installment payment, installment information (e.g., 1 of 2, 2 of 2, etc.) must appear after the asterisk.</p> <p>*Applicable MCC's – 5960, 5962, 5964, 5965, 5966, 5967, 5968 and 5969</p> <p>*These requirements also apply to Internet Payment Service Providers (IPSP)</p>		<i>Field Position</i>	<i>Data</i>	Option 1:	Pos. 1-3	Merchant name or abbreviation		Pos. 4:	Asterisk (*)		Pos. 5-25	Descriptive Information	Option 2:	Pos. 1-7	Merchant name or abbreviation		Pos. 8:	Asterisk (*)		Pos. 9-25	Descriptive Information	Option 3:	Pos. 1-12	Merchant name or abbreviation		Pos. 13:	Asterisk (*)		Pos. 14-25	Descriptive Information
	<i>Field Position</i>	<i>Data</i>																															
Option 1:	Pos. 1-3	Merchant name or abbreviation																															
	Pos. 4:	Asterisk (*)																															
	Pos. 5-25	Descriptive Information																															
Option 2:	Pos. 1-7	Merchant name or abbreviation																															
	Pos. 8:	Asterisk (*)																															
	Pos. 9-25	Descriptive Information																															
Option 3:	Pos. 1-12	Merchant name or abbreviation																															
	Pos. 13:	Asterisk (*)																															
	Pos. 14-25	Descriptive Information																															



Transaction Express Integration Guide



			classified with MCC 5967. The Sponsored Merchant name must be included after the asterisk beginning in position 5, 9, or 14 (e.g., IPSPname*SponsoredMerchantname).
--	--	--	---

PaymentDesc Format Examples:

Option 1:

1	5	10	15	20	25																			
H	P	P	*	3	0		D	A	Y	S		T	O		A		N	E	W		Y	O	U	

Option 2:

1	5	10	15	20	25																			
U	S	A	S	H	O	P	*	B	E	S	T		B	L	O	O	P	E	R	S				

Option 3:

1	5	10	15	20	25																		
A	M	E	R	I	C	A	N	C	H	E	F	*	C	O	O	K		W	E	A	R		

Option 4:

1	5	10	15	20	25																		
S	T	O	P		S	M	O	K	I	N	G	*	1		O	F		3					



9.23 US State Abbreviations

This table outlines the US State Abbreviations and allowed values for all State fields within each integration method. Note: Values must be in all CAPS.

Postal Abbreviation	
State	Postal Abbreviation
Alabama	AL
Alaska	AK
Arizona	AZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
Florida	FL
Georgia	GA
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Maryland	MD
Massachusetts	MA
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Montana	MT
Nebraska	NE
Nevada	NV
New Hampshire	NH



New Jersey	NJ
New Mexico	NM
New York	NY
North Carolina	NC
North Dakota	ND
Ohio	OH
Oklahoma	OK
Oregon	OR
Pennsylvania	PA
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
Vermont	VT
Virginia	VA
Washington	WA
West Virginia	WV
Wisconsin	WI
Wyoming	WY



9.24 Card Authentication Appendices

9.24.1 CAVV Result Codes

The following table defines **CAVV Result Code** for card authentication VISA transactions.

Code	Description
0	CAVV authentication result invalid
1	CAVV authentication failed validation
2	CAVV authentication passed validation
3	CAVV attempt passed validation
4	CAVV attempt failed validation
6	CAVV not validated; issuer not participating
7	CAVV attempt failed validation
8	CAVV attempt passed validation
9	CAVV attempt failed validation
A	CAVV attempt passed validation
B	CAVV authentication passed validation
C	CAVV attempt was not validated
D	CAVV authentication was not validated

9.24.2 ECI Result Codes

The following table defines **ECI Result Codes** for card authentication transactions returned in the GetTransactionDetail report.

Code	Description
00	Null
01	01 Single Transaction for MOTO
02	02 Recurring Transaction
03	03 Installment Payment
04	04 Unknown Classification
05	05 Secure
06	06 Secure-Capable
07	07 Standard eCommerce
08	08 Non-Secure



11	11 Single Non-Recurring SecureCode Phone Order
12	12 First Recurring SecureCode Phone Order
21	21 Mobile Payment

DO NOT COPY



9.25 Certification and Test Matrix Values

9.25.1 Standard Credit Card Responses

The following table contains the transaction amount you need to submit to create a specific transaction response.

Trx Amount	Card Type	Trx Response Code	Response Text	Notes
\$0.18	A	EC	CID Format Error	
\$1.01	A	00	Approval	
\$1.02	A	11	Declined Approved VIP	
\$1.03	A	08		
\$1.04	A	03	Term ID Error	
\$1.05	A	01	Call	
\$1.06	A	01	Call	
\$1.07	A	05	Decline	
\$1.08	A	05	Decline	
\$1.09	A	03	Term ID Error	
\$1.10	A	06	Error (General)	
\$1.13	A	57	Transaction not permitted to cardholder	
\$12.00	A	00	Approval	
\$15.00	A	10	Partial Approval	
\$10.00	D, P	10	Partial Approval	
\$10.01	D, P	01	Call	
\$10.02	D, P	02	Call	
\$10.03	D, P	03	Term ID Error	
\$10.04	D, P	04	Hold - Call	
\$10.05	D, P	05	Decline	
\$10.07	D, P	07	Hold - Call	
\$10.08	D, P	06	Declined Approved VIP	
\$10.10	D, P	10	Partial Approval	
\$10.11	D, P	00	Approval	
\$10.12	D, P	12	Invalid Trans	
\$10.13	D, P	13	Amount Error	
\$10.14	D, P	14	Call	



Transaction Express Integration Guide



Trx Amount	Card Type	Trx Response Code	Response Text	Notes
\$10.15	D, P	15	No Such Issuer	
\$10.19	D, P	19	Re-Enter	
\$10.30	D, P	30	30	
\$10.31	D, P	15	No Such Issuer	
\$10.33	D, P	54	Expired Card	
\$10.34	D, P	01	Call	
\$10.35	D, P	01	Call	
\$10.36	D, P	62	Decline	
\$10.37	D, P	01	Call	
\$10.38	D, P	75	PIN Exceeded	
\$10.39	D, P	39	No Credit Acct	
\$10.40	D, P	12	Invalid Trans	
\$10.41	D, P	41	Hold - Call	
\$10.43	D, P	43	Hold - Call	
\$10.51	D, P	05	Decline	
\$10.53	D, P	53	No Save Acct	
\$10.54	D, P	54	Expired Card	
\$10.55	D, P	55	Wrong PIN	
\$10.56	D, P	14	Card No Error	
\$10.57	D, P	57	Transaction not permitted to cardholder	
\$10.58	D, P	58	Serv Not Allowed	
\$10.59	D, P	05	Decline	
\$10.60	D, P	01	Call	
\$10.61	D, P	61	Decline	
\$10.62	D, P	62	Decline	
\$10.63	D, P	63	SEC Violation	
\$10.64	D, P	77	No Action Taken	
\$10.65	D, P	65	Decline	
\$10.66	D, P	01	Call	
\$10.67	D, P	04	Hold - Call	
\$10.68	D, P	68	68	
\$10.75	D, P	75	PIN Exceeded	
\$10.76	D, P	14	Card No Error	



Transaction Express Integration Guide



Trx Amount	Card Type	Trx Response Code	Response Text	Notes
\$10.77	D, P	14	Card No Error	
\$10.78	D, P	14	Card No Error	
\$10.87	D, P	91	No Reply	
\$10.91	D, P	91	No Reply	
\$10.92	D, P	92	Invalid Routing	
\$10.93	D, P	93	Decline	
\$10.94	D, P	94	Duplicate Trans	
\$10.96	D, P	96	System Error	
\$10.97	D, P	D3	System Error	
\$12.01	D, P	00	Approval	
\$12.02	D, P	00	Approval	
\$12.03	D, P	00	Approval	
\$12.04	D, P	00	Approval	
\$12.05	D, P	00	Approval	
\$12.06	D, P	00	Approval	
\$12.07	D, P	00	Approval	
\$12.08	D, P	00	Approval	
\$12.09	D, P	00	Approval	
\$12.10	D, P	00	Approval	
\$12.11	D, P	00	Approval	
\$13.01	D, P	00	Approval	
\$0.01	V, M, A	01	Call	
\$0.02	V, M	02	Call	
\$0.03	V	28	No Reply	
\$0.04	V, M	91	No Reply	
\$0.05	V, M, A	04	Pick up Card	
\$0.06	V	07	Hold - Call	
\$0.07	V, M	41	Hold - Call	
\$0.08	V, M	43	Hold - Call	
\$0.09	V	06	Error (General)	
\$0.10	V	79	Already Reversed	
\$0.11	V, A	13	Amount Error	
\$0.12	V	83	Can't Verify PIN	
\$0.13	V	86	Can't Verify PIN	



Transaction Express Integration Guide



Trx Amount	Card Type	Trx Response Code	Response Text	Notes
\$0.14	V, M, A	14	Invalid Acct Number	
\$0.15	V	82	Incorrect CVV	
\$0.16	V	N3	Cashback Not Avl	
\$0.17	V	06	Error (General)	
\$0.19	V, A	80	Date Error	
\$0.20	V, A	05	Decline	
\$0.21	V	51	Decline	
\$0.22	V	N4	Decline	
\$0.23	V	61	Decline	
\$0.24	V	62	Decline	
\$0.25	V	65	Decline	
\$0.26	V	93	Decline	
\$0.27	V	81	Encryption Error	
\$0.28	V	06	General Error	
\$0.29	V, M, A	54	Expired Card	
\$0.30	V, M	92	Invalid Routing	
\$0.31	V	12	Invalid Trans	
\$0.31	M	92	Invalid Trans	
\$0.32	V	78	No Account	
\$0.33	V	21	No Action Taken	
\$0.34	V	76	Unsolic Reversal	
\$0.35	V	77	No Action Taken	
\$0.36	V	52	No Check Account	
\$0.37	V	39	No Credit Acct	
\$0.38	V	53	No Save Acct	
\$0.39	V	15	No Such Issuer	
\$0.39	M	12	Invalid Routing	
\$0.40	V	75	PIN Exceeded	
\$0.41	V	19	Re-Enter	
\$0.42	V	63	SEC Violation	
\$0.43	V	57	Serv Not Allowed	
\$0.44	V, A	58	Serv Not Allowed	



Trx Amount	Card Type	Trx Response Code	Response Text	Notes
\$0.45	V	96	System Error	
\$0.46	V	03	Term ID Error	
\$0.47	V	55	Wrong PIN	
\$0.48	V	N7	CVV Mismatch	
\$0.49	V	85	Card OK	
\$0.50	V	00	Approval	
\$0.54	V	94	Duplicate Transaction	
\$0.96	V	R0	Stop Recurring	
\$0.97	V	R1	Stop Recurring	
\$1.07	V	00	Approval	
\$1.12	V	05	Decline	
\$1.13	V	05	Decline	
\$1.30	V	00	Approval	
\$1.31	V	00	Approval	
\$1.34	V	30	Msg Format Error	
\$10.00	V	00	Approval	Regular approved transaction.
\$11.10	V, M	10	Partial Approval	
\$32.48	V	00	Approval	No Auth Code
\$32.85	V	11	Approval	
\$32.85	M	08	Honor with ID	
\$34.04	V	00	Approval	

9.25.2 Address Verification Service (AVS) Responses

The following table contains the transaction amount you need to submit to create a specific address verification response.

Trx Amount	Card Type	ZIP Code	AVS Response Code	AVS Response Text
\$6.01	A	Any AVS Data	Y	Exact Match
\$6.02	A	Any AVS Data	N	No Match
\$6.03	A	Any AVS Data	A	Address Match
\$6.04	A	Any AVS Data	Z	ZIP Match
\$6.05	A	Any AVS Data	U	Ver Unavailable
\$6.06	A	Any AVS Data	S	Serv Unavailable



\$6.07	A	Any AVS Data	R	Retry
\$6.16	A	Any AVS Data	0	Invalid
N/A	V, M	99999	U	Ver Unavailable
N/A	V, M	99998	G	Ver Unavailable
N/A	V, M	999970001	A	Address Match
N/A	V, M	999970003	D	Exact Match
N/A	V, M	999970004	I	Ver Unavailable
N/A	V, M	999970005	M	Exact Match
N/A	V, M	999970006	P	Zip Match
N/A	V, M	999970007	A	Address Match
N/A	V, M	999970008	Y	Exact Match
N/A	V, M	999970009	S	Service Not Supported
N/A	V, M	999970010	R	Issuer System Unavailable
N/A	V, M, D	8320	A	Address Match

9.25.3 Card Verification Value (CVV) Responses

The following table contains the transaction amount you need to submit to create a specific CVV2 verification response. Note: The CVV2 value for Amex is 4 digits in comparison to 3 digits for all other card types.

Trx Amount	Card Type	CVV2 Value Submitted	CVV2 Response Code	Trx Response Code
\$7.01	A	9997	M - Match	00
\$7.02	A	9998	N - Non-Match	00
\$10.00	M	996 (Diners)	P	00
\$11.02	D	996	M - Match	00
\$11.02	M	998	M - Match	00
\$11.03	M	996 (Diners)	P	00
\$11.04	V	999	M - Match	00
\$11.00	V, M, D	123	N - Non-Match	05
\$11.06	M	123	N - Non-Match	05
\$11.07	D	123	N - Non-Match	05
\$11.08	V	123	N - Non-Match	05



Trx Amount	Card Type	CVV2 Value Submitted	CVV2 Response Code	Trx Response Code
\$11.09	M	123	N - Non-Match	05
\$11.11	D	123	N - Non-Match	05
\$91.01	V	899	U	00

9.25.4 Card Authentication Test Matrix

The following table defines the card authentication **test** matrix to trigger specific CAVV Result Code responses for Visa transactions.

Request Value	Response Code	CAVV Result Code
\$0.81	00	0
\$0.82	00	1
\$0.83	00	2
\$0.84	00	3
\$0.85	00	4
\$1.01	00	7
\$1.02	00	8
\$1.03	00	9
\$1.04	00	A
\$1.05	00	B
\$1.19	00	C
\$1.20	00	D



9.25.5 Test Credit Cards

The following table outlines test credit card numbers that should be utilized in the Cert environment in order to generate the responses outlined in the credit card test matrix.

Card Type	Card Number	Expiration Date
Visa	4485896261017708	Any Current/Future
MasterCard	5499740000000057	Any Current/Future
MasterCard Bin2	2223000010476528 2223000048400011	Any Current/Future
Diners (Considered Discover)	38555565010005	Any Current/Future
Discover	6011000991001201	Any Current/Future
Discover (19 Digit)	60110000000000000001	Any Current/Future
American Express	371449635392376	Any Current/Future
PayPal	6506000000000014	Any Current/Future
PayPal (19 Digit)	601104000000000003	Any Current/Future



9.25.6 Standard ACH Responses

The below ACH statuses change on TXP Cert at the daily settlement time of 12AM PST (TXP Production settlement time is 4pm PST).

Code	Status	Meaning	Trigger Amount	Expected	Rcodes
00	Processed	Transaction was accepted by Check Gateway and awaits Origination	1.23	Processed	None
01	Originated	Transaction was sent to the FED	1.24	Originated	None
02	Funded	Merchant has been paid for the transaction	1.25	Funded	None
03	Returned	Transaction was returned (cancelled) by the bank	1.26	Returned	R08
04	NSF	Insufficient funds; transaction was returned (cancelled) by the bank	1.27	NSF	R01
05	Chargeback	Transaction was returned (cancelled) by the consumer	1.28	Chargeback	R29
06	Invalid	Transaction was returned (cancelled) by the bank	1.29	Invalid	R04
07	Declined	Consumer verification was negative for the transaction	1.30	Declined	None
08	Refund	Transaction was refunded by the merchant	1.31	Refund	None
09	Processed	Transaction was accepted by Check Gateway and awaits Origination	1.32	Processed	None
10	Incomplete	Transaction was saved in the database, but remains in an incomplete state; transactions should only remain in this status for 1 second	1.33	Incomplete	None
11	Cancelled	Transaction was cancelled by the merchant	1.34	Cancelled	None
12	BO Exception	Transaction was declined by Back-Office validation	1.35	BO Exception	BOE 64
13	Downloaded	Transaction is being prepared for Origination by the Back-Office	1.36	Downloaded	None
14	Credit Originated	Transaction was sent to the FED	1.37	Credit Originated	None
15	Credit Downloaded	Transaction is being prepared for Origination by the Back-Office	1.38	Credit Downloaded	None
16	Credit Return	Transaction was returned (cancelled) by the bank	1.39	Credit Return	None
17	Credit Funded	Merchant has been paid for the transaction	1.40	Credit Funded	None
18	Declined Downloaded	Consumer verification was negative for the transaction	1.41	Declined Downloaded	None



Code	Status	Meaning	Trigger Amount	Expected	Rcodes
88	Authentication	Positive response from the authorization API (not a true transaction status)	1.45	Authentication	None

9.25.7 Test Bank Accounts

The following table defines **test** bank account information for ACH transaction testing.

For TXP Cert ACH Testing Only		
Routing #	123456780	
Account #	XXXXXXXXXXXX	any number between 0-9, minimum 10 digits- maximum 17 digits



This page intentionally left blank

DO NOT COPY