Circle APIs: API and Entity Errors

Troubleshoot and fine-tune your code using Circle's detailed error responses. Suggest Edits

The error codes used by Circle APIs fall into two categories, API response errors and entity errors. API response errors are returned immediately in response to API requests. Entity errors are associated with API entities such as payments and generally take seconds or minutes to return.

API Error Responses

When an API request is made and the error is known immediately, Circle APIs will return the appropriate HTTP status code along with a JSON error response. Because HTTP status codes do not always provide sufficient information about the cause of an error, Circle's API response errors provide more detailed JSON responses to help you determine what's gone wrong.

In the example below, the request is missing a required field. The HTTP Status code in this case would be HTTP/1.1 400 Bad Request

JSON {"code":2,"message":"Invalid entity. metadata.email may not be empty (was null)","errors": [{"error":"invalid_value","location":"metadata.email","message":"metadata.email may not be empty (was null)"}]}

API Error Types

You can automate the handling of certain error types. These include the following error names, which include example messages and constraints, where applicable:

error message constraints value_must_be_true field1 must be true (was false) NA value_must_be_false field1 must be false (was true) NA required field1 may not be null (was null) NA not_required field1 must be null (was foo) NA min_value field1 must be greater than or equal to 2 (was 0) "constraints": { "min": 2 } min_value field1 must be greater than 2.0 (was 2.0) "constraints": { "min": "2.0", "inclusive": false } max_value field1 must be less than or equal to 99 (was 1024) "constraints": { "max": 99 } max_value field1 be less than or equal to 99.99 (was 100) "constraints": { "max": "99.99", "inclusive": true } length_outside_bounds field1 must be between 2 and 5 (was qwerty) "constraints": { "min": 2, "max": 5 } pattern_mismatch field1 must match "[a-z]+" (was 123456) "constraints": { "pattern": "[a-z]+" } date_not_in_past field1 must be in the past (was 2020-08-31T18:18:54.211Z) NA date_not_in_future field1 must be in the future (was 2020-08-31T18:18:17.621Z) NA number_format field1 numeric value out of bounds (<3 digits>.<2 digits> expected) (was 123.456) "constraints": { "max-integral-digits": 2 }

API Error Format

Whenever an API request results in an error, the JSON response will contain both a high-level error code and a human-readable message within the body.

JSON HTTP/1.1 400 Bad Request Content-Type: application/json

{ "code": 2, "message": "Invalid entity.\n[...\n]" }

Extended error format

In some cases, you'll receive extended information about why a request has failed.

Example: If you fail to supply a value for a required field, you'll receive the following error response:

JSON HTTP/1.1 400 Bad Request Content-Type: application/json

{ "code": 2, "message": "Invalid entity.\nfield1 may not be null (was null)", "errors": [{ "error": "required", "message": "field1 may not be null (was null)", "location": "field1", "invalidValue": "null", "constraints": {} # see below for details }] } This extended error response contains one or more associated error descriptions. Error description attributes can be read as follows:

key meaning optional error type of an error false message human-friendly message false location period-separated path to the property that causes this error. An example could be field1 or address.billingCountry false invalidValue actual value of the property specified in location key, as received by the server true constraints special object that contains additional details about the error and could be used for programmatic handling on the client side true

List of API Error Codes

The table below shows the list of JSON error codes that may be returned in an API error response.

Code Message Description -1 Unknown Error An unknown error occurred processing the API request 1 Malformed authorization. Is the authorization type missing? API Key is missing or malformed 2 Invalid Entity Error with the JSON object passed in the request body 3 Forbidden API Key used with request does not have one of the roles authorized to call the API endpoint 1032 Account number is invalid or missing An invalid number was provided when creating a card 1051 Payment not found The payment id requested was not found 1068 Merchant account not associated with a marketplace Attempting to create a marketplace payment with a merchant that is not associated with the marketplace 1069 A wallet account could not be found Unable to find the wallet account referenced in a marketplace create payment request 1070 Marketplace info is required to create marketplace payment Marketplace info was not provided with a marketplace create payment request 1076 Payment amount did not fall within merchant charge limits The payment amount was greater than the maximum allowed limit or below the minimum allowed limit 1077 Payment amount is invalid Payment amount must be greater than zero 1078 Payment currency not supported An invalid currency value was used when making a payment 1083 Idempotency key already bound to other request The idempotency key used when making a request was used with another payment. Please retry with a different value 1084 This item cannot be canceled A cancel or refund request cannot be canceled 1085 This item cannot be refunded A cancel or refund request cannot be refunded 1086 This payment was already canceled This payment was already canceled 1087 Total amount to be refunded exceeds payment amount Total amount to be refunded exceeds payment amount 1088 Invalid source account An invalid source account was specified in a payout or transfer request 1089 The source account could not be found Unable to find the source account specified in a payout or transfer request 1091 Invalid wire routing number Could not find a bank with that routing number when creating wire bank account 1092 Invalid IBAN Invalid IBAN used in request to create a wire bank account 1093 Source account has insufficient funds The source account has insufficient funds for the payout or transfer amount 1094. The billing last name cannot be empty When creating a card or bank account the billing last name must be provided 1096 Encryption key id could not be found An encryption key id must be provided if request includes encrypted data 1097 Original payment is failed Attempting to cancel or refund a failed payment 1098 Wire payment amount failed Wire payment must be greater than the minimum amount 1099 The merchantWalletId query parameter is missing The merchantWalletId query parameter must be set in association with the walletId parameter to retrieve wallet settlements 1100 Invalid fiat account type The fiat account is invalid for the attempted payout type (e.g. using a business account for a marketplace payout) 1101 Invalid country format An invalid ISO 31660-2 country code was provided 1102 IBAN country mismatch IBAN does not match the provided bank country code 1103 IBAN required IBAN is required is this request 1104 Additional bank details required There are additional bank details required for this request; details of which are provided in the response 1105 Additional billing details required There are additional billing details required for this request; details of which are provided in the response 1106 Invalid district format Invalid district format, must be a 2 character value 1107 Payout limit exceeded Payout can't be accepted as it would exceed the given limit 1108 Unsupported Country Country not supported for customer 1109 Invalid bin range No bin range found for the card 1110 Invalid card number Card number is invalid 1111 Invalid issuer country Issuer country is invalid 1143 Checkout session not found The checkout session id passed in the request doesn't exist in the DB 1144 Checkout session is already in a completed state The checkout session cannot be extended because it is already in a complete state 2003 The recipient address already exists The blockchain address has already been associated with the account 2004 The address is not a verified withdrawal address The blockchain address must first be verified before it can be used as a destination in a transfer request 2005 The address belongs to an unsupported blockchain The blockchain type used as a transfer destination is not supported 2006 Wallet type is not supported The wallet type specified when creating an end user wallet is not supported 2007 Unsupported transfer A transfer from the provided source to the provided destination is not supported 5000 Invalid travel rule identity type The provided identity type must be either "individual" or "business" 5001 Payout does not found Payout doesn't exist based on the ID provided. Please check the payout id 5002 Invalid payout amount Payout amount must be more than 0 5003 Inactive destination address Cannot send payout to an inactive destination address. If you have just added the address, you may have to wait for 24 hours before use 5004 Destination address not found The destination address for this payout could not be found 5005 Source wallet not found Source wallet for this payout could not be found 5006 Insufficient funds The source wallet has insufficient funds for this payout 5007 Unsupported currency currency not currently supported for this operation 5011 Invalid destination address cannot send payout to an invalid destination address 5012 Invalid destination location types cannot search for both crypto and fiat payouts 5013 Invalid source wallet id source wallet id must be a number for payouts search 5014 The address is not valid for the blockchain Provided blockchain address is not valid for the corresponding blockchain 5015 Invalid destination chain Provided blockchain address has an invalid chain in respect to the currency used

Entity Error Responses

With entities such as payments, cards, bank wires, and transfers, an error is generally not known immediately, so no error code can be returned at the time of the request.

For instance, when making a payment, the transaction is processed asynchronously and the create payment request will have a status of pending. After processing, the status will eventually be set to approved or failed.

API entities such as payments and cards are processed asynchronously after the initial create request is made. If a problem occurs while processing the request (the status is shown as failed), the errorCode property is set on the entity and can be retrieved either by polling the GET endpoint or via a notification. The response explains why the payment was unsuccessful.

Here are some Entity error codes associated with payments, cards, bank wires, and transfers.

Payment Error Codes

Code Description payment failed Payment failed due to an unknown reason payment fraud detected Suspected fraud detected by Issuing bank. Please instruct your user to contact their bank directly to resolve payment denied Payment denied by Circle Risk Service, see payment riskReasonCode for more details payment not supported by issuer Issuer bank was unable to process the transaction payment_not_funded There were insufficient funds to cover the payment amount payment stopped by issuer A stop has been placed by the issuer or customer payment canceled Payment was canceled payment failed balance check Payment failed the Plaid balance check due to insufficient funds payment_unprocessable The provided encryptedData could not be processed card_failed The payment failed due to a problem with the card such as an incorrect card number card invalid The card number was invalid card cvv invalid Incorrect CVV value provided card_expired Card expired card_limit_violated The amount or frequency of payments exceeded card limits card_not_honored The issuing bank did not approve the payment card_account_ineligible The card is not linked to an eligible bank account card_restricted Transaction not permitted to cardholder. Issuer has declined the transaction because the card cannot be used for this type of transaction. Please instruct your user to use a different payment method unauthorized_transaction The user has advised the bank that the payment was not authorized bank account ineligible The account is not eligible and no other default account was found bank transaction error The bank reported an error processing the transaction invalid account number The account number is invalid or missing invalid wire rtn The wire routing number is invalid ref id invalid Push payment reference Id not recognized account name mismatch Account name does not match Circle resource account name account number mismatch Push payment account number does not match Circle resource account number account ineligible Ineligible fiat account due to invalid type or state customer name mismatch Customer full name doesn't match sender name institution name mismatch Institution name doesn't match sender name

Card Verification Error Codes

Code Description verification_failed Verification failed due to an unknown reason verification_fraud_detected Card suspected to be used for fraud risk_denied Card denied by Circle Risk Service, see riskEvaluation for more details verification_not_supported_by_issuer Issuer bank was unable to process the transaction verification_stopped_by_issuer A stop has been placed on the card card_failed Verification failed due to a problem with the card such as the card number does not exist card_invalid The card number was invalid card_address_mismatch The billing address provided in the card creation request did not match the one recorded by the issuer bank card_zip_mismatch The postal code provided in the card creation request did not match the one recorded by the issuer bank card_cvv_invalid Incorrect CVV value provided card_expired Card expired card_not_honored The issuing bank did not authorize the card card_account_ineligible The card is not linked to an eligible bank account card_limit_violated The amount or frequency of payments exceeded card limits card_cvv_required The cvv is either incorrect or missing three_d_secure_not_supported 3DS transactions are not supported by the issuing bank three_d_secure_failure The customer failed the 3DS authentication step three_d_secure_action_expired The customer took too long to finish the 3DS process. This typically expires after 15 minutes three_d_secure_invalid_request The 3DS request was submitted with invalid parameters

Payout Error Codes

Code Description insufficient_funds Exchange insufficient funds transaction_denied The transaction was denied as the fiat account is not verified transaction_failed Transaction failed due to an unknown reason transaction_returned The transaction was returned bank_transaction_error The bank reported an error processing the transaction fiat_account_limit_exceeded The Fiat account limit exceeded invalid_bank_account_number The bank account number is invalid or missing invalid wire rtn The wire routing number is invalid sen not supported account number to must be a valid SEN account

Transfer Error Codes