



E-Commerce Non 3DS API v2.0

Integration Guide

September 1, 2022

Table of Contents

Change Log,	3
1. Introduction	4
2. E-Commerce Overview	4
3. PowerTranz Gateway Endpoints and Operations	4
4. PowerTranz Request Header Requirements	5
5. Request parameters.....	6
5.1 Request Parameters details– Auth, Sale, RiskMgmt	6
5.2 Request Parameters details– Capture, Refund, Void	8
6. Response Parameters – All Transaction Types	8
7. PowerTranz Auth, Sale and RiskMgmt Request Examples	9
7.1 Auth Request (with full PAN)	9
7.2 Auth Request (with Powertranz token)	10
7.3 Auth Request (with Sentry token).....	11
7.4 Capture Request.....	11
7.5 Sale Request.....	12
7.6 Sale Request (with Powertranz token)	13
7.7 Sale Request (with Sentry token)	14
7.8 Refund Request.....	14
7.9 Void Request	15
7.10 Tokenize Request	15
8. Special Considerations	16
8.1 Tokenization.....	16
8.2 Transaction and Order Identifiers	16
10. Test Cards and Cases	17
Appendix 1 – Response Codes.....	18
PowerTranz Response Code and Error Information	18
Payment ISO Response Codes	19
CVV2 Response Codes.....	20

Change Log,

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1.0	Initial Version	August 29, 2022
2.0	- added section 5.2	September 1, 2022

1. Introduction

This document is a developer's guide for integrating PowerTranz payment processing without 3DS authentication. This integration guide covers e-commerce transactions with or without tokenization.

2. E-Commerce Overview

The PowerTranz gateway supports tokenization sends financial requests (authorization, sale, capture, refund, or void) to the payment networks for cardholder authorization.

A financial request is initiated by using the Auth, Sale, Capture, Refund or Void endpoints.

A tokenize only request is initiated by using the RiskMgmt API with the Tokenize flag enabled.

Calls to the PowerTranz API are performed by using REST with JSON over HTTPS as the transport protocol.

Externally accessible BASE URLs for the PowerTranz endpoints are:

Staging: <https://staging.ptranz.com/api/<endpoint>>

Prod: <https://TBD.ptranz.com/api/<endpoint>>

Note: production URL will be provided when transitioning to production environment

3. PowerTranz Gateway Endpoints and Operations

PowerTranz exposes a set of financial and nonfinancial endpoints for merchant transaction processing. The table below shows endpoints with a brief description of their usage and their URL.

Endpoint	Description	Type	Method	URL
Alive	Gateway status	Non-financial	GET	<API Root>/api/alive
Auth	Performs an authorization securing funds for later capture.	Financial	POST	<API Root>/api/auth
Sale	Performs an authorization with capture.	Financial		<API Root>/api/sale

RiskMgmt	Non-financial transaction. Use this to tokenize a card	Non-financial	POST	<API Root>/api/riskmgmt
Capture	Capture a previously authorized transaction.	Financial	POST	<API Root>/api/capture
Refund	Refund a previously authorized transaction.	Financial	POST	<API Root>/api/refund
Void	Void an authorization.	Financial	POST	<API Root>/api/void

The Swagger page for PowerTranz API provides parameter information in JSON format.

<https://staging.ptranz.com/api/swagger/index.html>

4. PowerTranz Request Header Requirements

All requests to endpoints are HTTP POST requests over TLS with JSON payloads in the body. It is mandatory that the http header includes merchant authentication parameters (e.g. PowerTranzId and Password). Merchants should call PowerTranz API endpoints using a HTTP POST and send request parameters in JSON format.

Field Name	Req	Format	Length Max/Value	Notes
PowerTranz-PowerTranzId	M	AN	25	Merchant identifier for the merchant's account with PowerTranz. Example : 99901066
PowerTranz-PowerTranzPassword	M	AN	100	This is the merchant's unique processing password. Example : m9mOPK@vpUM
PowerTranz-GatewayKey	C	GUID (string)	36	Additional token assigned by Powertranz Do not send until value is provided by PowerTranz

5. Request parameters

5.1 Request Parameters details– Auth, Sale, RiskMgmt

(M)andatory, (O)ptional, (C)onditional

Parameter Name	Req	Format	Length Max/Value	Description
TransactionIdentifier	M	GUID (string)	36	Unique identifier assigned by merchant application Example : f62c3e58-1983-4165-8535-fe5bb6ba6127
TotalAmount	M	DEC	18,3	Total authentication amount
TaxAmount	O	DEC	18,3	Tax Amount
CurrencyCode	M	N	4	Must use numeric currency code (ISO 4217)
ThreeDSecure	M	BOOL		Set to false
Tokenize	C	BOOL		PanToken will be returned if Tokenize is set to true for the RiskMgmt endpoint
Source				Mandatory nested object within message body (see Data Subset below)
CardPan	M	N	19	Card number
CardCvv	O	N	4	Card verification value
CardExpiration	M	N	4	Expiry date in YYMM format
CardholderName	M	AN	2-45	Cardholder name No special characters, no accents, no special symbols (Example: æ é à ñ * + & ;) and best to avoid all symbols but basic punctuation is acceptable such as periods and dashes (. and -)
Token	O	AN	100	PanToken returned in previous response
TokenType	O	AN	3	Use PG2 if using Sentry token. For Powertranz token don't send
OrderIdentifier	M	AN	255	Order ID assigned by the merchant
BillingAddress				Mandatory nested object within message body (see Data Subset below)
FirstName	O	AN	30	First Name No special characters, no accents, no special symbols (Example: æ é à ñ * + & ;) and best to avoid all symbols but basic punctuation is acceptable such as periods and dashes (. and -)
LastName	O	AN	30	Last Name No special characters, no accents, no special symbols (Example: æ é à ñ * + & ;) and best to avoid all symbols but basic punctuation is acceptable such as periods and dashes (. and -)
Line1	O	AN	30	Address line 1 (required for AVS) No special characters, no accents, no special symbols (Example: æ é à ñ * + & ;) and best to avoid all symbols but basic punctuation is acceptable such as periods and dashes (. and -)
Line2	O	AN	50	Address line 2 No special characters, no accents, no special symbols (Example: æ é à ñ * + & ;) and best to avoid all symbols but basic punctuation is acceptable such as periods and dashes (. and -)

City	O	AN	25	City No special characters, no accents, no special symbols (Example: æ é à ñ * + & : ;) and best to avoid all symbols but basic punctuation is acceptable such as periods and dashes (. and -)
County	O	AN	25	County
State	O	AN	25	State – if supplied must be the country subdivision code defined in ISO 3166-2. For US addresses only correct abbreviations are allowed valid samples :FL ,CA
PostalCode	O	AN	10	Postal or Zip code (required for AVS) Strictly Alphanumeric only - No special characters, no accents, no spaces, no dashes...etc.
CountryCode	C	AN	3	Must contain valid numeric country code (ISO 3166) Must be supplied if State is populated.
EmailAddress	O	AN	50	Email address
PhoneNumber	O	AN	20	Valid phone number including country code Valid examples: 35301176543210 35301176543210 01176543210 (must include CountryCode)
PhoneNumber2	O	AN	20	Mobile phone (see above validations)
PhoneNumber3	O	AN	20	Work phone (see above validation)
ShippingAddress				Optional nested object within message body (see Data Subset below) Note the same validations for BillingAddress apply)
FirstName	O	AN	30	First Name
LastName	O	AN	30	Last Name
Line1	O	AN	30	Address line 1 (required for AVS) No special characters, no accents, no special symbols (Example: æ é à ñ * + & : ;) and best to avoid all symbols but basic punctuation is acceptable such as periods and dashes (. and -)
Line2	O	AN	50	Address line 2 No special characters, no accents, no special symbols (Example: æ é à ñ * + & : ;) and best to avoid all symbols but basic punctuation is acceptable such as periods and dashes (. and -)
City	O	AN	25	City
County	O	AN	25	County
State	O	AN	25	State
PostalCode	O	AN	10	Postal or Zip code (required for AVS) Strictly Alphanumeric only - No special characters, no accents, no spaces, no dashes...etc.
CountryCode	O	AN	3	Must contain valid numeric country code (ISO 4217)
EmailAddress	O	AN	50	Email address
PhoneNumber	O	AN	20	Home phone
PhoneNumber2	O	AN	20	Mobile phone
PhoneNumber3	O	AN	20	Work phone
AddressMatch	O	BOOL		If 'true' shipping address and billing address match

5.2 Request Parameters details– Capture, Refund, Void

(M)andatory, (O)ptional, (C)onditional

Note: partial voids are not supported. Only partial captures are supported.

For certain acquirers a void is required after the partial capture to close the transaction. Please check with the support team for details on how to process partial captures.

Parameter Name	Req	Format	Length Max/Value	Description
TransactionIdentifier	M	GUID (string)	36	TransactionIdentifier of the Original Transaction of which is to be captured/refunded or voided
TotalAmount	C	DEC	18,3	Total amount Required for Capture and Refund only
TaxAmount	O	DEC	18,3	Tax Amount Required for Capture if tax sent in authorization
Refund	C	BOOL		Mandatory for refunds: Set to true

6. Response Parameters – All Transaction Types

(P)resent, (C)onditional

Parameter Name	Req	Format	Length Max/Value	Description
TransactionType	P	numeric	2	Transaction type indicator is returned (1-Auth, 2-Sale, 3-Capture, 4-Void, 5-Refund, 8-RiskMgmt)
Approved	P	BOOL		Status of the transaction
AuthorizationCode	C	AN	6	Authorization code of the authorization or sale transaction
TransactionIdentifier	P	GUID (string)	36	Unique identifier assigned by merchant application Example : f62c3e58-1983-4165-8535-fe5bb6ba6127
TotalAmount	P	DEC	18,3	Amount of the transaction processed
CurrencyCode	P	N	3	Currency of the transaction
CardBrand	P	AN	255	Brand of the card for informational purposes
IsoResponseCode	P	AN	3	Main response code to indicate approval, decline or failure
ResponseMessage	P	AN	255	Descriptive response of IsoResponseCode
RRN	P	string	12	Retrieval reference number
OriginalTrxnIdentifier	C	GUID (string)	36	Transaction Identifier of the original transaction returned in Capture, Refund or Void response
ExternalIdentifier	C	AN	255	Returned if provided in request
PanToken	C	AN	100	PAN token
OrderIdentifier	P	AN	255	OrderIdentifier from request
RiskManagement				
CvvResponseCode	C			CVV2 result
Errors	C			
Code	C	AN	2	Error code
Message	C	AN	255	Descriptive text of error code

7. PowerTranz Auth, Sale and RiskMgmt Request Examples

The Auth, Sale and RiskMgmt requests all inherit from the same base and they share the same parameters.

Note: Some parameters can/must be excluded depending on the nature of the request.

7.1 Auth Request (with full PAN)

Auth Request	Auth Response
<pre>POST https://staging.ptranz.com/Api/auth HTTP/1.1 Accept: application/json PowerTranz-PowerTranzId: #PowerTranzPasswordId# PowerTranz-PowerTranzPassword: #PowerTranzPassword# Content-Type: application/json; charset=utf-8 Host: staging.ptranz.com Content-Length: TBD Expect: 100-continue Connection: Keep-Alive { "TransactionIdentifier": "5ee7d7c1-af78-4d7e-9386-abb280822b73", "TotalAmount": 1, "CurrencyCode": "978", "ThreeDSecure": false, "Source": { "CardPan": "511501000000001", "CardCvv": "123", "CardExpiration": "2512", "CardholderName": "John Doe" }, "OrderIdentifier": "INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569", "BillingAddress": { "FirstName": "John", "LastName": "Smith", "Line1": "1200 Whitewall Blvd.", "Line2": "Unit 15", "City": "Boston", "State": "NY", "PostalCode": "200341", "CountryCode": "840", "EmailAddress": "john.smith@gmail.com", "PhoneNumber": "211-345-6790" }, "AddressMatch": false }</pre>	<pre>{ "TransactionType": 1, "Approved": true, "AuthorizationCode": "123456", "TransactionIdentifier": "5ee7d7c1-af78-4d7e-9386-abb280822b73", "TotalAmount": 1.0, "CurrencyCode": "978", "RRN": "223919793834", "CardBrand": " MasterCard", "IsoResponseCode": "00", "ResponseMessage": "Transaction is approved", "PanToken": "jy81o9recp0nsppkhcm3g1qpr7gae9d3w9skm0vhjrytzk2r8", "OrderIdentifier": " INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" }</pre>

7.2 Auth Request (with Powertranz token)

Auth Request	Auth Response
<pre>POST https://staging.ptranz.com/Api/auth HTTP/1.1 Accept: application/json PowerTranz-PowerTranzId: #PowerTranzPasswordId# PowerTranz-PowerTranzPassword: #PowerTranzPassword# Content-Type: application/json; charset=utf-8 Host: staging.ptranz.com Content-Length: TBD Expect: 100-continue Connection: Keep-Alive { "TransactionIdentifier": "5ee7d7c1-af78-4d7e-9386-abb280822b73", "TotalAmount": 10.2, "CurrencyCode": "978", "Tokenize": true, "ThreeDSecure": false, "Source": { "Token": "28zezcudowtoepj685759opnt96g6eavzkgjetrg6czcl8ywn", "CardCvv": "123", "CardExpiration": "2512", "CardholderName": "John Doe" }, "OrderIdentifier": "INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" }</pre>	<pre>{ "TransactionType": 1, "Approved": true, "AuthorizationCode": "123456", "TransactionIdentifier": "5ee7d7c1-af78-4d7e-9386-abb280822b73", "TotalAmount": 10.2, "CurrencyCode": "978", "RRN": "223919793834", "CardBrand": " Visa", "IsoResponseCode": "00", "ResponseMessage": "Transaction is approved", "PanToken": "28zezcudowtoepj685759opnt96g6eavzkgjetrg6czcl8ywn", "OrderIdentifier": " INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" }</pre>

7.3 Auth Request (with Sentry token)

Auth Response	Auth Response
<pre>POST https://staging.ptranz.com/Api/auth HTTP/1.1 Accept: application/json PowerTranz-PowerTranzId: #PowerTranzPasswordId# PowerTranz-PowerTranzPassword: #PowerTranzPassword# Content-Type: application/json; charset=utf-8 Host: staging.ptranz.com Content-Length: TBD Expect: 100-continue Connection: Keep-Alive { "TransactionIdentifier": "67a7689d-efe0-4a21-a3c3-cd8b55d7825f", "TotalAmount": 10.2, "CurrencyCode": "840", "Tokenize": true, "ThreeDSecure": false, "Source": { "Token": "411111_000021111", "TokenType": "PG2", "CardCvv": "123", "CardExpiration": "2512", "CardholderName": "John Doe" }, "OrderIdentifier": "INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" }</pre>	<pre>{ "TransactionType": 1, "Approved": true, "AuthorizationCode": "123456", "TransactionIdentifier": "5ee7d7c1-af78-4d7e-9386-abb280822b73", "TotalAmount": 10.2, "CurrencyCode": "978", "RRN": "223919793834", "CardBrand": " Visa", "IsoResponseCode": "00", "ResponseMessage": "Transaction is approved", "RiskManagement": { "CvvResponseCode": "M" }, "PanToken": "28zezcdudowtoepj685759opnt96g6eavzkgjetrg6czcl8ywn", "OrderIdentifier": " INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" }</pre>

7.4 Capture Request

Capture Request	Capture Response
<pre>POST https://staging.ptranz.com/Api/capture HTTP/1.1 Host: staging.ptranz.com Accept: text/plain PowerTranz-PowerTranzId: #PowerTranzPasswordId# PowerTranz-PowerTranzPassword: #PowerTranzPassword# Request-Id: 8f9d8e1f-482cd3595d7a08db. Content-Type: application/json-patch+json Content-Length: TBD { "TransactionIdentifier": "67a7689d-efe0-4a21-a3c3-cd8b55d7825f ", "TotalAmount": 1 }</pre>	<pre>{ "OriginalTrxnIdentifier": "67a7689d-efe0-4a21-a3c3-cd8b55d7825f", "TransactionType": 3, "Approved": true, "TransactionIdentifier": "4f3fae73-b43a-4016-ae93-24f88d98e079", "TotalAmount": 1, "CurrencyCode": "978", "RRN": "127011162582", "IsoResponseCode": "00", "ResponseMessage": "Transaction is approved" }</pre>

7.5 Sale Request

Sale Request	Sale Response
<pre> POST https://staging.ptranz.com/Api/sale HTTP/1.1 Accept: application/json PowerTranz-PowerTranzId: #PowerTranzPasswordId# PowerTranz-PowerTranzPassword: #PowerTranzPassword# Content-Type: application/json; charset=utf-8 Host: staging.ptranz.com Content-Length: TBD Expect: 100-continue Connection: Keep-Alive { "TransactionIdentifier": "5ee7d7c1-af78-4d7e-9386-abb280822b73", "TotalAmount": 1, "CurrencyCode": "978", "ThreeDSecure": false, "Source": { "CardPan": "5115010000000001", "CardCvv": "123", "CardExpiration": "2512", "CardholderName": "John Doe" }, "OrderIdentifier": "INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569", "BillingAddress": { "FirstName": "John", "LastName": "Smith", "Line1": "1200 Whitewall Blvd.", "Line2": "Unit 15", "City": "Boston", "State": "NY", "PostalCode": "200341", "CountryCode": "840", "EmailAddress": "john.smith@gmail.com", "PhoneNumber": "211-345-6790" }, "AddressMatch": false } </pre>	<pre> { "TransactionType": 2, "Approved": true, "AuthorizationCode": "123456", "TransactionIdentifier": "5ee7d7c1-af78-4d7e-9386-abb280822b73", "TotalAmount": 1, "CurrencyCode": "978", "RRN": "223919793834", "CardBrand": "MasterCard ", "IsoResponseCode": "00", "ResponseMessage": "Transaction is approved", "PanToken": "28zezcdudowtoepj685759opnt96g6eavzkgjetrg6czcl8ywn ", "OrderIdentifier": " INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" } </pre>

7.6 Sale Request (with Powertranz token)

Sale Request	Sale Response
<pre> POST https://staging.ptranz.com/Api/sale HTTP/1.1 Accept: application/json PowerTranz-PowerTranzId: #PowerTranzPasswordId# PowerTranz-PowerTranzPassword: #PowerTranzPassword# Content-Type: application/json; charset=utf-8 Host: staging.ptranz.com Content-Length: TBD Expect: 100-continue Connection: Keep-Alive { "TransactionIdentifier": "5ee7d7c1-af78-4d7e-9386-abb280822b73", "TotalAmount": 10.2, "CurrencyCode": "978", "Tokenize": true, "ThreeDSecure": false, "Source": { "Token": "28zezcdudowtoepj685759opnt96g6eavzkgjetrg6czc18ywn", "CardCvv": "123", "CardExpiration": "2512", "CardholderName": "John Doe" }, "OrderIdentifier": "INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" } </pre>	<pre> { "TransactionType": 2, "Approved": true, "AuthorizationCode": "123456", "TransactionIdentifier": "5ee7d7c1-af78-4d7e-9386-abb280822b73", "TotalAmount": 10.2, "CurrencyCode": "978", "RRN": "223919793834", "CardBrand": " Visa", "IsoResponseCode": "00", "ResponseMessage": "Transaction is approved", "PanToken": "28zezcdudowtoepj685759opnt96g6eavzkgjetrg6czc18ywn", "OrderIdentifier": " INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" } </pre>

7.7 Sale Request (with Sentry token)

Sale Request	Sale Response
<pre> POST https://staging.ptranz.com/Api/sale HTTP/1.1 Accept: application/json PowerTranz-PowerTranzId: #PowerTranzPasswordId# PowerTranz-PowerTranzPassword: #PowerTranzPassword# Content-Type: application/json; charset=utf-8 Host: staging.ptranz.com Content-Length: TBD Expect: 100-continue Connection: Keep-Alive { "TransactionIdentifier": "67a7689d-efe0-4a21-a3c3-cd8b55d7825f", "TotalAmount": 10.2, "CurrencyCode": "840", "Tokenize": true, "ThreeDSecure": false, "Source": { "Token": "411111_000021111", "TokenType": "PG2", "CardCvv": "123", "CardExpiration": "2512", "CardholderName": "John Doe" }, "OrderIdentifier": "INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" } </pre>	<pre> { "TransactionType": 2, "Approved": true, "AuthorizationCode": "123456", "TransactionIdentifier": "5ee7d7c1-af78-4d7e-9386-abb280822b73", "TotalAmount": 10.2, "CurrencyCode": "978", "RRN": "223919793834", "CardBrand": " Visa", "IsoResponseCode": "00", "ResponseMessage": "Transaction is approved", "RiskManagement": { "CvvResponseCode": "M" }, "PanToken": "28zezcdudowtoepj685759opnt96g6eavzkgjetrg6czcl8ywn", "OrderIdentifier": " INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" } </pre>

7.8 Refund Request

Refund Request	Refund Response
<pre> POST https://staging.ptranz.com/Api/refund HTTP/1.1 Host: dev.ptranz.com Accept: text/plain PowerTranz-PowerTranzId: #PowerTranzPasswordId# PowerTranz-PowerTranzPassword: #PowerTranzPassword# Request-Id: 8f9d8e1f-482cd3595d7a08db. Content-Type: application/json-patch+json Content-Length: TBD { "Refund": true, "TransactionIdentifier": "67a7689d-efe0-4a21-a3c3-cd8b55d7825f ", "TotalAmount": 1 } </pre>	<pre> { "OriginalTrxnIdentifier": "67a7689d-efe0-4a21-a3c3-cd8b55d7825f", "TransactionType": 5, "Approved": true, "TransactionIdentifier": "0446a902-311d-4868-8247-e9dfbd8ea0a6", "TotalAmount": 1, "CurrencyCode": "978", "RRN": "127013162598", "IsoResponseCode": "00", "ResponseMessage": "Transaction is approved" } </pre>

7.9 Void Request

Void Request	Void Response
<pre> POST https://staging.ptranz.com/Api/void HTTP/1.1 Host: dev.ptranz.com Accept: text/plain PowerTranz-PowerTranzId: #PowerTranzPasswordId# PowerTranz-PowerTranzPassword: #PowerTranzPassword# Request-Id: 8f9d8e1f-482cd3595d7a08db. Content-Type: application/json-patch+json Content-Length: TBD { "TransactionIdentifier": "67a7689d-efe0-4a21-a3c3-cd8b55d7825f" } </pre>	<pre> { "OriginalTrxnIdentifier": "67a7689d-efe0-4a21-a3c3-cd8b55d7825f", "TransactionType": 4, "Approved": true, "TransactionIdentifier": "2f38fa61-2fba-4523-9ccd-652108c37ba8 ", "TotalAmount": 1, "CurrencyCode": "978", "RRN": "127011162583", "IsoResponseCode": "00", "ResponseMessage": "Transaction is approved"} </pre>

7.10 Tokenize Request

Tokenize Request	Tokenize Response
<pre> POST https://staging.ptranz.com/Api/RiskMgmt HTTP/1.1 Host: staging.ptranz.com Accept: text/plain PowerTranz-PowerTranzId: #PowerTranzPasswordId# PowerTranz-PowerTranzPassword: #PowerTranzPassword# Request-Id: 8f9d8e1f-482cd3595d7a08db. Content-Type: application/json-patch+json Content-Length: TBD { "TransactionIdentifier": "7b689a53-cc82-4456-98d6-5eb9faa1b0f0", "TotalAmount": 0, "CurrencyCode": "840", "Tokenize": true, "ThreeDSecure": false, "Source": { "CardPan": "511501000000001", "CardCvv": "123", "CardExpiration": "2512", "CardholderName": "John Doe" }, "OrderIdentifier": "INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" } </pre>	<pre> { "TransactionType": 8, "Approved": false, "TransactionIdentifier": "7b689a53-cc82-4456-98d6-5eb9faa1b0f0", "TotalAmount": 0.0, "CurrencyCode": "840", "CardBrand": " MasterCard", "IsoResponseCode": "TK0", "ResponseMessage": "Tokenize complete", "PanToken": "28zezcdudowtoepj685759opnt96g6eavzkgjetrg6czcl8ywn", "OrderIdentifier": "INT-95e75078-7d58-40e8-8053-c3d488f05f59-Orc 3569" } </pre>

8. Special Considerations

8.1 Tokenization

Use the RiskMgmt endpoint to tokenize a card and return a PanToken. This token can be used subsequently to make financial transactions.

If the card is expired a tokenize request is required to update the expiry date.

TokenType is only required if a legacy Sentry Token is used in the transaction request. In this case send TokenType with value "PG2". Otherwise, don't send TokenType field.

A PanToken will also be returned for financial transactions if desired. Please check with the support team for details on how to enable the return of PanToken on financial transactions.

8.2 Transaction and Order Identifiers

PowerTranz requires a unique **TransactionIdentifier** and **OrderIdentifier** for all transactions that should be generated by the merchant.

The TransactionIdentifier is a GUID format and is the unique ID within PowerTranz.

The OrderIdentifier is one of the values used in the Merchant Portal and reports and must be unique for each approved transaction.

10. Test Cards and Cases

Authorizations/Sales will approve for the following test cases.

Test Case	Card Number	Card Type	Status
V2-01-YA	4012000000020071	Visa	Approved
V2-02-AA	4012000000020089	Visa	Approved
M2-01-YA	5100270000000023	Mastercard	Approved
M2-02-RA	5100270000000072	Mastercard	Approved
A2-01-YA	341111000000009	Amex	Approved
DS-01-0A	6011111111111111	Discover	Approved
JC-01-0A	3528111111111108	JCB	Approved

Authorizations/Sales will decline for the following test cases

Test Case	Card Number	Card Type	Status
V2-02-AD	4666666666662222	Visa	ISO Response Code = 05, CVV Response = N
M2-03-UD	5555666666662222	Mastercard	ISO Response Code = 05, CVV Response = N
V2-03-AD	4111111111119999	Visa	ISO Response Code = 98
V2-04-YD	4111111111110000	Visa	ISO Response Code = 91
M2-05-YD	5111111111110000	Mastercard	ISO Response Code = 91
DS-01-0D	6011111111111152	Discover	ISO Response Code = 05
JC-01-0D	3528111111111157	JCB	ISO Response Code = 05, CVV Response = N

Appendix 1 – Response Codes

PowerTranz Response Code and Error Information

Approved

ISO Response Code	Response Code	Response Message	Error Detail
00		Transaction is approved.	
TKO		Tokenize complete	

Declined

ISO Response Code	Response Code	Response Message	Error Detail
03	310	Invalid merchant	
05	22	Transaction is declined	Default decline
12	315	Invalid card/currency	Invalid card/currency
12	321	Processing errors	Processing errors
12	326	Invalid transaction	Host plugin field invalid: {field name}
12	330	Invalid transaction	Not permitted {field name}
12	343	Invalid transaction	Invalid merchant
12	386	Invalid transaction	Trxn is closed
12	384	Invalid transaction	Invalid refund
12	387	Duplicate transaction	Duplicate TransactionIdentifier
12	354	Invalid transaction	Crypto error
12	380	Invalid transaction	Original auth invalid
12	381	Invalid transaction	Original auth not found
12	382	Invalid transaction	Original auth invalid
12	383	Invalid transaction	Invalid amount
12	344	Invalid transaction	Merchant closed
12	345	Invalid transaction	Payment setting disabled
12	370	Transaction mismatch	Simulator transaction mismatch
12	320	Invalid transaction	Invalid test transaction
12	426	Invalid transaction	Host plugin field invalid: {field name}
12	362	Invalid transaction	Invalid transaction
12	361	Invalid transaction	Invalid transaction
57	316	Invalid card type	Invalid card type
89	312	Failed authentication	Invalid credentials
91	391	Host timeout	Host timeout
91	392	Host comms error	Host comms error
91	329	Host comms error	Host not available
96	424	System error	Internal communication error
96	44	System error	General GateApi error
96	432	System error	Missing action: {field name}
96	459	System error	Persistence error
96	460	System error	Card mapping error
96	85	System error	SPI system error
96	850	System error	HPP system error
96	325	Host processing error	Host processing error

96	332	System error	Missing route
96	317	System error	Internal timeout
96	353	System error	TLV parse failure
96	332	System error	Missing route.
96	49	System error	Indeterminate: {field name}
96	456	System error	RiskMgmt not operational
96	457	System error	General RiskMgmt error
96	458	System error	Invalid route
96	45	System error	General api error
96	450	System error	General gate error
96	451	System error	General processor error
96	452	System error	General processor error
96	453	System error	TLV parse failure
96	455	System error	Api not operational
96	417	System error	Internal timeout
96	42	System error	Gate not available
96	421	System errors	Multiple errors detected
96	422	Host processing error	Host plugin error
96	425	Host processing error	Host processing error
96	43	System error	Internal routing error
96	431	System error	Rule error
96	433	System error	Invalid route
97	36	Request failed validation	Invalid request
97	37	Request failed validation	Missing field(s): {field name}
97	38	Request failed validation	Field is invalid: {field name}
97	57	Request failed validation	Missing 3DS field: {field name}
97	58	Request failed validation	Invalid 3DS field: {field name}
98	428	System error	Host plugin error
99	441	System error	Response code error
99	490	General error	General error
99	390	General error	General error
99	327	Host comms error	PL error

Payment ISO Response Codes

Response Code & Description		Response Code & Description	
00	Approved	53	No savings account
01	Refer to issuer	54	Expired card
02	Refer to issuer (special)	55	Incorrect PIN
03	Invalid merchant	56	No card record
04	Pick-up card	57	Transaction not permitted to card
05	Do not honor	58	Transaction not permitted to card
06	Error	59	Suspected fraud
07	Pick-up card (special)	60	Card acceptor contact acquirer
08	Honor with identification	61	Exceeds withdrawal limit
09	Request in progress	62	Restricted card
10	Approved for partial amount	63	Security violation
11	VIP Approval	64	Original amount incorrect
12	Invalid transaction	65	Activity count exceeded

13	Invalid amount	66	Card acceptor call acquirer
14	Card number does not exist	67	Card pick up at ATM
15	No such issuer	68	Response received too late
16	Approved, update track 3	75	Too many wrong PIN tries
17	Customer cancellation	76	Previous message not found
18	Customer dispute	77	Data does not match original message
19	Re-enter transaction	80	Invalid date
20	Invalid response	81	Cryptographic error in PIN
21	No action taken (no match)	82	Incorrect CVV
22	Suspected malfunction	83	Unable to verify PIN
23	Unacceptable transaction fee	84	Invalid authorization life cycle
24	File update not supported by receiver	85	No reason to decline
25	Unable to locate record	86	PIN validation not possible
26	Duplicate file update record	88	Cryptographic failure
27	File update field edit error	89	Authentication failure
28	File temporarily unavailable	90	Cutoff is in process
29	File update not successful	91	Issuer or switch inoperative
30	Format error	92	No routing path
31	Issuer sign-off	93	Violation of law
32	Completed partially	94	Duplicate transmission
33	Expired card	95	Reconcile error
34	Suspected fraud	96	System malfunction
35	Card acceptor contact acquirer	97	Format Error
36	Restricted card	98	Host Unreachable
37	Card acceptor call acquirer	99	Errored Transaction
38	Allowable PIN tries exceeded	N0	Force STIP
39	No credit account	N3	Cash Service Not Available
40	Function not supported	N4	Cash request exceeds issuer limit
41	Pick-up card (lost card)	N7	Decline for CVV2 failure
42	No universal account	P2	Invalid biller information
43	Pick-up card (stolen card)	P5	PIN Change Unblock Declined
44	No investment account	P6	Unsafe PIN
51	Not sufficient funds	XA	Forward to issuer
52	No checking account	XD	Forward to issuer

CVV2 Response Codes

Code	Definition
M	Match
N	No match.
P	Not Processed
S	Should be on card but was not provided. (Visa only)
U	Issuer not participating or certified.