

Gateway Payment Service API

Version 1.0

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# Overview

## Audience

This document is intended to be used by the merchant’s technical staff. For any information not explained in this user guide, contact Client Services.

## Payment Service

The Hosted Payment Page integrates your shopping cart with Pinwheel Hosted page Shopping cart must redirect customers to pinwheel hosted page to complete the payment.

## Location

Live Hosted Page is located at: [https://api.paybypinwheel.com/front-calls/go-in/hosted-page-pay](https://api.paybypinwheel.com/api/transaction/api)

**Sandbox Hosted Page is located at** : [https://api.dev1.pinwheelportal.com//front-calls/go-in/hosted-page-pay](https://api.dev1.pinwheelportal.com//api/transaction/api)

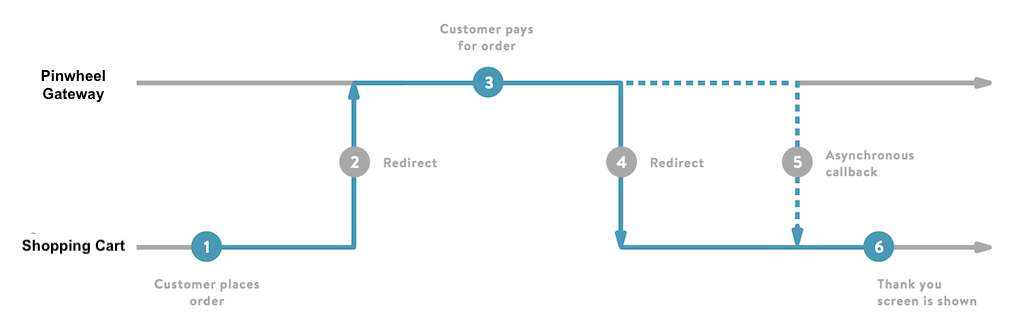
## Gateway Sandbox Creentials

**contact Pinwheel to get sandbox credentials**

# Getting Started with Hosted Payment Page

To begin integration with Pinwheel, you would need to get the Pinwheel sandbox credentials

The checkout process, including what the customer sees and doesn't see, has six stages:



1. The customer places an order with a Shopping Cart. They enter their email, shipping address and delivery method, and then select Pinwheel gateway as their payment option.
2. On the last step of Cart Checkout the customer is redirected to Pinwheel gateway's URL using a POST request along with [**Request Values**](#_heading=h.26in1rg). Pinwheel gateway verifies the **signature** value and presents its own hosted payments page to the customer (see **Signing Mechanism**).
3. The customer pays for the order on the Pinwheel hosted payment page.
4. It is best practice for your payment gateway to also POST a callback asynchronously to **url\_callback** with the same Response Values. This ensures that orders can be completed even in cases where the customer's connection to Cart’s is terminated prematurely. Callbacks are in HTTP POST x-www-form-urlencoded format.
5. The order is complete, and a thank-you page is shown to customer:
   * HTTP 200 indicates successful receipt of a callback by Pinwheel. If **url\_callback url\_callback** is provided in the request
   * Shopping Cart should handle callback request carefully so that duplicate callback requests for the same transaction are ignored

# Hosted Payment Page - CC

## Location

Live Hosted Page is located at: [https://api.paybypinwheel.com/front-calls/go-in/hosted-page-pay](https://api.paybypinwheel.com/api/transaction/api)

Sandbox Hosted Page is located at :[https://api.dev1.pinwheelportal.com//front-calls/go-in/hosted-page-pay](https://api.dev1.pinwheelportal.com//api/transaction/api)

## Method

Post

## Content-Type

application/x-www-form-urlencoded

## Encoding

Payment Service API uses 8-bit Unicode Transformation Format as described in the ISO/ISE 10646. Merchants are required to send Service requests with content-type, “application/x-www-form-urlencoded”; and charset, “iso-8859-1,\*, utf-8” using HTTP Post method.

## Gateway signing mechanism

All requests and responses must be signed/verified using HMAC-SHA256 where:

* **Key :** is a value known to both the Shopping Cart/merchant and Pinwheel. T**his is typically the Pinwheel Gateway “Password" field for the merchant**.
* **Message**: is a string of all key-value pairs being sent to Pinwheel in the hosted payment request , sorted alphabetically, and concatenated without separators.

Resulting codes must be hex-encoded and passed as the value of the **signature** field in the payment request payload.

## Sales Transaction

### Sales Transaction Parameters

The table below only includes typical parameters sent in a simple Sales transaction request

| Field | Description | Data Type | Required |
| --- | --- | --- | --- |
| req\_username | Pinwheel Gateway Username | Alphanumeric | Required |
| transaction\_type | Service Request Action (Send “CAPTURE”) | Alphanumeric | Required |
| amount | Transaction Amount | Numeric | Required |
| request\_currency | 3-letter Currency Code | Alphanumeric  Example: USD | Required |
| cust\_fname | Cardholder’s First Name | Alphanumeric | Optional\*\* |
| cust\_lname | Cardholder’s Last Name | Alphanumeric | Optional\*\* |
| cust\_email | Cardholder’s Email Address | Alphanumeric | Optional\*\* |
| cust\_phone | Cardholder’s Phone Number | Numeric | Optional\*\* |
| bill\_addr | Cardholder Billing Street Address | Alphanumeric | Optional\*\* |
| bill\_addr\_2 | Cardholder Billing Street Address 2 | Alphanumeric | Optional\*\* |
| bill\_addr\_city | Cardholder’s Billing City | Alphanumeric | Optional\*\* |
| bill\_addr\_state | Cardholder’s Billing State | 2-letter State or Territory Code | Optional\*\* |
| bill\_addr\_zip | Cardholder’s Billing Postal/ZIP code | Alphanumeric | Optional\*\* |
| bill\_addr\_country | Cardholder’s Billing Country | 2-letter Country Code  ISO 3166-1 alpha-2 | Optional\*\* |
| xtl\_order\_id | Cart Order/reference ID | Alphanumeric | Optional\*\* |
| url\_cancel | URL to which customer must be redirected when they wish to quit payment flow and return to the Cart. | URL |  |
| url\_complete | URL to which customer must be redirected upon successfully completing payment flow.l | URL | Required |
| url\_failed | URL to which customer must be redirected upon failing the payment flow. | URL | Required |
| url\_callback | Callback webhook URL to which a callback notification should be sent asynchronously. | URL | Required |
| url\_pending | Pending url | URL |  |
| signature | Signature | Alphanumeric | Required## |
| cart\_name | Cat Name (Send “Hosted-Page”) | String | Required |

**\*\* Optionals are optional but can be required depending on the processor.**

**## Generate Signature**

1. Sort non empty request payload alphabetically and create string
2. Create signature using SHA256
3. Example:

**String**: ‘amount1bill\_addr4/22bill\_addr\_2Addbill\_addr\_cityCaliforniabill\_addr\_countryUSbill\_addr\_stateCAbill\_addr\_zip90025url\_callbackhttp://localhost:3000/call-back-success-urlcust\_emailtest@test.comcust\_fnameTestcust\_lnameTestcust\_phone01234567890req\_usernameapi@zsandnoxz.testrequest\_currencyUSDurl\_cancelhttp://localhost:3000/decline-paymenturl\_completehttp://localhost:3000/success-paymenturl\_failedhttp://localhost:3000/failed-paymenturl\_pendinghttp://localhost:3000/pending-paymentxtl\_order\_id123456’

**Generated Signature:** ‘5bdb5b954b0291cfdb0de2a277142140fd11d93298ba614f3486ee5d92d0a094’

### Sales Transaction Request Examples

submit a form request to

Live Hosted Page : [https://api.paybypinwheel.com/front-calls/go-in/hosted-page-pay](https://api.paybypinwheel.com/api/transaction/api)

Sandbox Hosted :[https://api.dev1.pinwheelportal.com//front-calls/go-in/hosted-page-pay](https://api.dev1.pinwheelportal.com//api/transaction/api)

-H 'Content-Type: application/x-www-form-urlencoded' \

with request payload and generated signature

### Sales Transaction Success Response Fields

These are the fields returned to **url\_complete** as query params to the merchant when a transaction has been approved by the Payment Service.

| Field Name | Description |
| --- | --- |
| REQUEST\_ACTION | This will return CAPTURE |
| TRANS\_STATUS\_NAME | Transaction Status APPROVED : Transaction has been approved. |
| TRANS\_VALUE | Transaction amount. |
| TRANS\_REQUEST\_ID | Unique transaction ID |
| TRANS\_ORDER\_ID | order ID. **This ID should be used in the refund transaction call** |
| TRANS\_RECORD\_ID | Extra transaction Tracking ID |
| XTL\_ORDER\_ID | Merchant order ID as sent by merchant in the sale transaction API call |
| TRANS\_CUR | 3-letter Currency Code |
| TIMESTAMP | Timestamp |
| SIGNATURE | SIgnature\*\*\* |

### Success Transaction Response Example

{

"REQUEST\_ACTION": "CAPTURE",

"TRANS\_STATUS\_NAME": "APPROVED",

"TRANS\_VALUE": "1.0000",

"TRANS\_REQUEST\_ID": 1272,

"TRANS\_RECORD\_ID": 79154,

"TRANS\_ORDER\_ID": 0980982o121,

"XTL\_ORDER\_ID": "000011112222",

"TRANS\_CUR": "USD",

"TIMESTAMP": "2021-05-06T11:16:50Z",

“SIGNATURE":"0e3c70ceef918cee019dd261a058bd111b7f85ca35dca01bb3c75327af06d284"

}

### Sales Transaction Failed Response Fields

These are the fields returned to the merchant when a transaction has been declined by the Payment Service.

| Field Name | Description |
| --- | --- |
| REQUEST\_ACTION | This will return CAPTURE |
| TRANS\_STATUS\_NAME | Transaction Status DECLINED : Transaction has been declined. |
| TRANS\_VALUE | Transaction amount. |
| TRANS\_REQUEST\_ID | Unique transaction ID |
| TRANS\_ORDER\_ID | order ID. **This ID should be used in the refund transaction call** |
| TRANS\_RECORD\_ID | Extra transaction Tracking ID |
| XTL\_ORDER\_ID | Merchant order ID as sent by merchant in the sale transaction API call |
| TRANS\_CUR | 3-letter Currency Code |
| TIMESTAMP | Timestamp |
| SIGNATURE | SIgnature\*\*\* |
| API\_ADVICE | API advice message |
| SERVICE\_ADVICE | Service advice message |
| PROCESSOR\_ADVICE | Processor advice message |
| ERROR\_MESSAGE | Error message |

### Failed Transaction Response Example

{

"REQUEST\_ACTION": "CAPTURE",

"TRANS\_STATUS\_NAME": "DECLINED",

"TRANS\_VALUE": "1.0000",

"TRANS\_REQUEST\_ID": 1272,

"TRANS\_RECORD\_ID": 79154,

"TRANS\_ORDER\_ID": 0980982o121,

"XTL\_ORDER\_ID": "000011112222",

"TRANS\_CUR": "USD",

"API\_ADVICE": "DECLINED",

"SERVICE\_ADVICE": "DECLINED",

"PROCESSOR\_ADVICE": "DECLINED",

"ERROR\_MESSAGE": "DECLINED",

"TIMESTAMP": "2021-05-06T11:16:50Z",

“SIGNATURE":"0e3c70ceef918cee019dd261a058bd111b7f85ca35dca01bb3c75327af06d284"

}

### Sales Transaction Pending Response Fields

These are the fields returned to the merchant when a transaction has been pending by the Payment Service.

| Field Name | Description |
| --- | --- |
| REQUEST\_ACTION | This will return CAPTURE |
| TRANS\_STATUS\_NAME | Transaction Status APPROVED : Transaction has been approved. |
| TRANS\_VALUE | Transaction amount. |
| TRANS\_REQUEST\_ID | Unique transaction ID |
| TRANS\_ORDER\_ID | order ID. **This ID should be used in the refund transaction call** |
| TRANS\_RECORD\_ID | Extra transaction Tracking ID |
| XTL\_ORDER\_ID | Merchant order ID as sent by merchant in the sale transaction API call |
| TRANS\_CUR | 3-letter Currency Code |
| TIMESTAMP | Timestamp |
| SIGNATURE | SIgnature\*\*\* |

### Pending Transaction Response Example

{

"REQUEST\_ACTION": "CAPTURE",

"TRANS\_STATUS\_NAME": "PENDING",

"TRANS\_VALUE": "1.0000",

"TRANS\_REQUEST\_ID": 1272,

"TRANS\_RECORD\_ID": 79154,

"TRANS\_ORDER\_ID": 0980982o121,

"XTL\_ORDER\_ID": "000011112222",

"TRANS\_CUR": "USD",

"TIMESTAMP": "2021-05-06T11:16:50Z",

“SIGNATURE": "0e3c70ceef918cee019dd261a058bd111b7f85ca35dca01bb3c75327af06d284"

}

\*\*\* Signature Verify

1. Remove “SIGNATURE” from response
2. Sort payload alphabetically and create string
3. Create signature using SHA256
4. Example:

**String**: ‘API\_ADVICEDECLINEERROR\_MESSAGEDECLINEPROCESSOR\_ADVICEDECLINEREQUEST\_ACTIONCAPTURESERVICE\_ADVICEDECLINETIMESTAMP2021-05-10T12:30:10ZTRANS\_CURUSDTRANS\_ORDER\_ID187697436TRANS\_RECORD\_ID1442805TRANS\_REQUEST\_ID1364252TRANS\_STATUS\_NAMEDECLINEDTRANS\_VALUE0.0100XTL\_ORDER\_ID1212’

**Generated Signature:** ‘83de3c4a27f597f3412414e6665d4f517c4cb97a6698628bf599fade4e1a22c4’

## Refund Transaction

Merchants may request to refund the original sales transaction by sending CCCREDIT in the request\_action parameter.

### Refund Transaction Parameters

| Field | Description | Data Type | Required |
| --- | --- | --- | --- |
| req\_username | Username | Alphanumeric | Required |
| request\_action | Service Request Action (Send “CCCREDIT”) | Alphanumeric | Required |
| amount | amount to refund. | Numeric | Required |
| request\_ref\_po\_id | To do a refund request, send the Order ID (**TRANS\_ORDER\_ID**) of the original transaction in the request\_ref\_po\_id parameter. | Alphanumeric | Required |
| url\_callback | Callback webhook url | String | Required |
| signature | Signature | Alphanumeric | Required## |

### Refund Transaction Request Examples

curl -X POST \

https://api.paybypinwheel.com/api/transaction/api \

-H 'Content-Type: application/x-www-form-urlencoded' \

-H 'cache-control: no-cache' \

-d 'request\_ref\_po\_id=186434737&request\_action=CCCREDIT&amount=0.1&req\_username=api%40zsandnoxz.test&req\_password=ouNcbdp68KMNBVNDOkPJ'

### Refund Transaction Success Response Fields

These are the fields returned to the merchant when a transaction has been approved by the Payment Service.

| Field Name | Description |
| --- | --- |
| REQUEST\_ACTION | This will return REFUND |
| TRANS\_STATUS\_NAME | Transaction Status APPROVED : Refund has been approved. |
| TRANS\_VALUE | refunded amount. |
| TRANS\_REQUEST\_ID | Unique transaction ID |
| TRANS\_ORDER\_ID | **TRANS\_ORDER\_ID**. |
| TRANS\_RECORD\_ID | Extra transaction Tracking ID |
| XTL\_ORDER\_ID | Merchant order ID as sent by merchant in the sale transaction API call |
| TRANS\_CUR | 3-letter Currency Code |
| TIMESTAMP | Timestamp |
| SIGNATURE | SIgnature\*\*\* |

### Refund Transaction Success Response Example

{

"REQUEST\_ACTION": "REFUND",

"TRANS\_STATUS\_NAME": "APPROVED",

"TRANS\_VALUE": "0.1000",

"TRANS\_REQUEST\_ID": 80282,

"TRANS\_RECORD\_ID": 78443,

"TRANS\_ORDER\_ID": 186434737,

"XTL\_ORDER\_ID": "000011112222",

"TRANS\_CUR": "USD",

"TIMESTAMP": "USD", "SIGNATURE":"adaed58f5c99a3a219e3b85cf88409970134abfed018d1d884eef64491beece3"

}

### Refund Transaction Failed Response Fields

These are the fields returned to the merchant when a transaction has been approved by the Payment Service.

| Field Name | Description |
| --- | --- |
| REQUEST\_ACTION | This will return REFUND |
| TRANS\_STATUS\_NAME | Transaction Status **DECLINED** : Refund has been declined. |
| TRANS\_VALUE | refund amount. |
| TRANS\_REQUEST\_ID | Unique transaction ID |
| TRANS\_ORDER\_ID | Transaction order ID. |
| XTL\_ORDER\_ID | Merchant order ID as sent by merchant in the sale transaction API call |
| TRANS\_CUR | 3-letter Currency Code |
| API\_ADVICE | Payment Service API Response details. |
| SERVICE\_ADVICE | Service Response details |
| PROCESSOR\_ADVICE | Merchant Account Service Response details |
| ERROR\_MESSAGE | Error Message. or transaction decline reason |
| TIMESTAMP | Timestamp |
| SIGNATURE | SIgnature\*\*\* |

### Refund Transaction Failed Response Fields Example

{

"REQUEST\_ACTION": "REFUND",

"TRANS\_STATUS\_NAME": "DECLINED",

"TRANS\_VALUE": "1.0000",

"TRANS\_REQUEST\_ID": 1364267,

"TRANS\_RECORD\_ID": 1442813,

"TRANS\_ORDER\_ID": 187697446,

"XTL\_ORDER\_ID": "111",

"API\_ADVICE": "Refund amount may not exceed the transaction balance REFID:3138129324",

"SERVICE\_ADVICE": "Refund amount may not exceed the transaction balance REFID:3138129324",

"PROCESSOR\_ADVICE": "Refund amount may not exceed the transaction balance REFID:3138129324",

"ERROR\_MESSAGE": "Refund amount may not exceed the transaction balance REFID:3138129324",

"TRANS\_CUR": "USD",

"TIMESTAMP": "2021-05-10T13:37:47Z",

"SIGNATURE": "c2a95b88467a5e3d5b0c06ec57797f7999b6bc069cdb3bfbef61b84c483e5198"

}

### 

## Declined Transaction Response Fields

These are the fields returned to the merchant when the transaction request has been declined on the Merchant Account Processor (bank) level: **Send 5.02 as amount to test decline transaction**

| Field Name | Description |
| --- | --- |
| REQUEST\_ACTION | This will return CAPTURE |
| TRANS\_STATUS\_NAME | Transaction Status **DECLINED** : Transaction has been declined. |
| TRANS\_VALUE | transaction amount. |
| TRANS\_REQUEST\_ID | Unique transaction ID |
| TRANS\_ORDER\_ID | Transaction order ID. |
| TRANS\_RECORD\_ID | Extra transaction Tracking ID |
| XTL\_ORDER\_ID | Merchant order ID as sent by merchant in the sale transaction API call |
| TRANS\_CUR | 3-letter Currency Code |
| API\_ADVICE | Payment Service API Response details. |
| SERVICE\_ADVICE | Service Response details |
| PROCESSOR\_ADVICE | Merchant Account Service Response details |
| ERROR\_MESSAGE | Error Message. or transaction decline reason |

### Declined Transaction Response Example

{

"REQUEST\_ACTION": "CAPTURE",

"TRANS\_STATUS\_NAME": "DECLINED",

"TRANS\_VALUE": "5.0200",

"TRANS\_REQUEST\_ID": 81271,

"TRANS\_RECORD\_ID": 79153,

"TRANS\_ORDER\_ID": 186435723,

"XTL\_ORDER\_ID": "000011112222",

"API\_ADVICE": "",

"SERVICE\_ADVICE": "",

"PROCESSOR\_ADVICE": "",

"ERROR\_MESSAGE": "Expired Card",

"TRANS\_CUR": "USD"

}

## Refund Declined Response Fields

These are the fields returned to the merchant when the refund request has been declined on the Merchant Account Processor (bank) level:

| Field Name | Description |
| --- | --- |
| REQUEST\_ACTION | This will return REFUND |
| TRANS\_STATUS\_NAME | Transaction Status **DECLINED** : Refund has been declined. |
| TRANS\_VALUE | refund amount. |
| TRANS\_REQUEST\_ID | Unique transaction ID |
| TRANS\_ORDER\_ID | Transaction order ID. |
| XTL\_ORDER\_ID | Merchant order ID as sent by merchant in the sale transaction API call |
| TRANS\_CUR | 3-letter Currency Code |
| API\_ADVICE | Payment Service API Response details. |
| SERVICE\_ADVICE | Service Response details |
| PROCESSOR\_ADVICE | Merchant Account Service Response details |
| ERROR\_MESSAGE | Error Message. or transaction decline reason |

### Declined Transaction Response Example

{

"REQUEST\_ACTION": "REFUND",

"TRANS\_STATUS\_NAME": "DECLINED",

"TRANS\_VALUE": "2.0000",

"TRANS\_REQUEST\_ID": 81489,

"TRANS\_ORDER\_ID": 186435936,

"XTL\_ORDER\_ID": "000011112222",

"API\_ADVICE": "Requested refund amount is greater than Order amount balance! [OrderAmountBalance:1.02, RequestedRefundAmount:2]",

"SERVICE\_ADVICE": "Requested refund amount is greater than Order amount balance! [OrderAmountBalance:1.02, RequestedRefundAmount:2]",

"PROCESSOR\_ADVICE": "Requested refund amount is greater than Order amount balance! [OrderAmountBalance:1.02, RequestedRefundAmount:2]",

"ERROR\_MESSAGE": "Requested refund amount is greater than Order amount balance! [OrderAmountBalance:1.02, RequestedRefundAmount:2]",

"TRANS\_CUR": "USD"

}

# Testing

## Using the test account

Merchant can test the Integration by asking for Sandbox credentials and sandbox URLS:

Username :

Password :

## Basic Gateway Test

* To cause a declined message, pass an amount less than $1.
* For Succesful Transaction pass an amount greater than $1

## 

## Test Credit Card

Use the credit cards below with **any address, future expiration date and CVV data.**

| Network | Credit Card Number |
| --- | --- |
| MasterCard | 5431111111111111 |
| Visa | 4111111111111111 |
| Credit Card Expiration: | 12/25 |
| CVV | 123 |