# API Definitions

## `POST` /api/accessToken

This API is used to obtain an access token use to authenticate your requests. The API returns an access token and a refresh token. The access token has a lifespan of 30 minutes, during which time you can use the access token to authenticate requests to the API. When the access token expires, you must use the refresh token to obtain a new access token.

## Request Fields

**apiKey** `String` `Required`

Use your Account name and secret and concatenate them together separated by a colon ":" character and Base64 encoded to create the apiKey (refer to https://www.rfc-editor.org/rfc/rfc2617#section-2 for further information).

E.g.:
Sandbox Account: Sandbox
Sandbox Secret: 1234567890

Request should 1) concatenate, 2) base64 encode

1) Sandbox:1234567890
2) U2FuZGJveDoxMjM0NTY3ODkw
You will pass that as you apiKey in the request to /accessToken

The following code snippet can be used to assist in this step:

```
final String authHeader = "Basic " +
Base64.getEncoder().withoutPadding().encodeToString((userName+":"+password).getBytes());
    request.header("Authorization", authHeader);
```

Generate a new access token from a refresh token

When your access token expires, use the /refreshToken endpoint to generate a new access token/refresh token pair. Send a request to the /refreshToken endpoint with the refresh token in the body of the request. The API returns a new access token and a new refresh token. Use the new access token to authenticate requests to the API and use the refresh token to generate a new access token if needed. You do not need to use the /refreshToken endpoint when your application first loads. It is documented here as part of the authentication workflow.

## Response Fields

**accessToken** `String`

> The access token to be used in your request.

**refreshToken** `String`

> Used in a subsequent API call if/when your initial token expires.

**tokenType** `String`

**expiresIn** `Integer`

> Number of seconds before this token expires.

**message** `String`

> Reserved for additional instructions as necessary.

# `POST` /api/refreshToken

> When your access token expires, use the /refreshToken endpoint to generate a new access token/refresh token pair. Send a request to the /refreshToken endpoint with the refresh token you received in your last request. The API returns a new access token and a new refresh token. Use the new access token to authenticate requests to the API and use the refresh token to generate a new access token if needed. You do not need to use the /refreshToken endpoint when your application first loads.

## Request Fields

**refreshToken** `String` `Required`

> Use the refreshToken value that was returned in your last token request API call.

## Response Fields

**accessToken** `String`

> The access token to be used in your request.

**refreshToken** `String`

> Used in a subsequent API call if/when this token expires.

**tokenType** `String`

**expiresIn** `Integer`

Number of seconds before this token expires.

**message** `String`

Reserved for additional instructions as necessary.

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# PUT /api/v1/transactions/{transactionId}

This API is used to provide immediate transaction events for the specific transactionId. The call is intended to be repeated as the consumer is updating their shopping cart to reflect items added, modified, or removed from their purchase.

## Request Header

**transactionId** `String` `Required`

The unique transaction identifier provided via the initiate API call.

## Request Body

**productCode** `String` `Required`

Customer's product code.

**productDescription** `String` `Required`

Customer's description of product item.

**quantity** `Integer` `Required` minimum: 0

Number of product items.

**amount** `JSON Array` `Required`

> **amount** `number` `Required` minimum: 0
>
> Value of the goods that are being purchased.
>
> **currencyCode** `String` `Required` minimum: 3 maximum: 3
>
> Three letter ISO 4217 currency code for this purchased amount.

**eventType** `String` `Required` pattern: add / update / remove

Describes if this transaction event is adding, updating or removing items from the consumers shopping cart.

**discount** `JSON Array` `Optional`

> **amount** `number` `Required` minimum: 0

Discounted value of the goods being purchased.

**currencyCode** `String` `Required` minimum: 3 maximum: 3

Three letter ISO 4217 currency code for this discounted amount.

**isGiftCard** `Boolean` `Optional` pattern: true / false

Used to reflect if this particular product item being purchased is using a gift card.

**productType** `String` `Optional` pattern: physical / digital / virtual / unknown

Describes the tangibility characteristics of the goods being purchased.

**uniqueCartId** `String` `Optional`

This is a unique identifier used to define the item that is being purchased.

## Response Fields

**apiVersion** `String`

Version of the API used for this request.

**time** `String` format: yyyy-mm-dd hh:mm:ss.sss

The date and time (in UTC) this transaction was processed.

**data** `JSON Array`

**transactionId** `String`

The unique identification for this transaction. This Id should be used for all future API calls related to this transaction.

## Response Codes

| Response Code | Description |
| --- | --- |
| 200 | ok |
| 400 | Bad Request |
| 401 | Unauthorized |
| 403 | Forbidden |
| 412 | Precondition Failed |
| 415 | Unsupported Media Type |
| 500 | Internal Server Error |

# POST /api/v1/transactions/evaluate/{transactionId}

This API is used to provide the final transaction information once the consumer has submitted their shopping cart items and proceeded to checkout. This call results in the response providing the decision of the transaction.

## Request Header

**transactionId** `String` `Required`

> The unique transaction identifier provided via the initiate API call.

## Request Body

**orderNumber** `String` `Optional`

> Customer's order number for this transaction.

**customerOrderStatus** `String` `Optional`

> Customer's order status for this transaction.

**totalAmount** `JSON Array` `Required`

> **amount** `number` `Required` minimum: 0
>
> > Total value of the goods that are being purchased.
>
> **currencyCode** `String` `Required` minimum: 3 maximum: 3
>
> > Three letter ISO 4217 currency code for this purchased amount.

**totalDiscount** `JSON Array` `Optional`

> **amount** `number` `Required` minimum: 0
>
> > Total discounted value of the goods being purchased.
>
> **currencyCode** `String` `Required` minimum: 3 maximum: 3
>
> > Three letter ISO 4217 currency code for this discounted amount.

**totalTaxAmount** `JSON Array` `Optional`

> **amount** `number` `Required` minimum: 0
>
> > Total discounted value of the goods being purchased.
>
> **currencyCode** `String` `Required` minimum: 3 maximum: 3
>
> > Three letter ISO 4217 currency code for this discounted amount.

**payments** `JSON Array` `Required`

One or more of the following payment types must be provided.

**creditCards** `JSON Array` `Conditional`

> **binNumber** `String` `Required` minimum: 6 maximum: 6 pattern: ^(0|[1-9][0-9]*)$
>
> > The first 6 digits of the Bank Identification Number on a payment card.
>
> **lastFour** `String` `Required` minimum: 4 maximum: 4 pattern: ^(0|[1-9][0-9]*)$
>
> > The last 4 digits found on the payment card.
>
> **paymentId** `String` `Required`
>
> > The identification number generated to track the transaction.
>
> **gateway** `String` `Required`
>
> > The Gateway provider utilized for this transaction.
>
> **billingAddress** `JSON Array` `Optional`
>
> > **firstName** `String` `Required` minimum: 1 maximum: 20
> >
> > > The cardholder's first name of the consumer listed on the payment card.
> >
> > **lastName** `String` `Required` minimum: 1 maximum: 20
> >
> > > The cardholder's last name of the consumer listed on the payment card.
> >
> > **addressLine1** `String` `Required` minimum: 1 maximum: 60
> >
> > > The cardholder's address, line 1.
> >
> > **addressLine2** `String` `Optional` minimum: 1 maximum: 60
> >
> > > The cardholder's address, line 2.
> >
> > **unitNumber** `String` `Optional` minimum: 0 maximum: 5
> >
> > > The cardholder's address unit number.
> >
> > **buildingNumber** `String` `Optional`
> >
> > > The cardholder's address building number.
> >
> > **streetOrBlock** `String` `Optional`
> >
> > > The cardholder's address street or block indication.
> >
> > **neighborhood** `String` `Optional`
> >
> > > The cardholder's address neighborhood indication.

**city** `String` `Required` minimum: 1 maximum: 30

The cardholder's city.

**regionCode** `String` `Required` minimum: 1 maximum: 30

The cardholder's region name. For U.S. addresses, use the two-character state code.

**postalCode** `String` `Required` minimum: 1 maximum: 10

The cardholder's zip or postal code.

**countryCode** `String` `Required` minimum: 2 maximum: 2

The cardholder's two-character country code. Use the ISO-3166 official country codes.

**amount** `JSON Array` `Required`

**amount** `number` `Required` minimum: 0

The amount of money sent for authorization.

**currencyCode** `String` `Required` minimum: 3 maximum: 3

Three letter ISO 4217 currency code for this discounted amount.

**responseCodes** `JSON Array` `Optional`

One of the following options must be provided.

**addressVerification** `String` `Conditional`

The result of your acquirer's address verification system (AVS) check.

**authorization** `String` `Conditional`

The result from the authorization transaction.

**cardVerificationValue** `String` `Conditional`

The result of your acquirer's card verification value (CVV) check.

**giftCards** `JSON Array` `Conditional`

**billingAddress** `JSON Array` `Optional`

**firstName** `String` `Required` minimum: 1 maximum: 20

The first name of the consumer of this gift card.

**lastName** `String` `Required` minimum: 1 maximum: 20

The last name of the consumer of this gift card.

**addressLine1** `String` `Required` minimum: 1 maximum: 60

The gift card holder's address, line 1.

**addressLine2** `String` `Optional` minimum: 1 maximum: 60

The gift card holder's address, line 2.

**unitNumber** `String` `Optional` minimum: 0 maximum: 5

The gift card holder's address unit number.

**buildingNumber** `String` `Optional`

The gift card holder's address building number.

**streetOrBlock** `String` `Optional`

The gift card holder's address street or block indication.

**neighborhood** `String` `Optional`

The gift card holder's address neighborhood indication.

**city** `String` `Required` minimum: 1 maximum: 30

The gift card holder's city.

**regionCode** `String` `Required` minimum: 1 maximum: 30

The gift card holder's region name. For U.S. addresses, use the two-character state code.

**postalCode** `String` `Required` minimum: 1 maximum: 10

The gift card holder's zip or postal code.

**countryCode** `String` `Required` minimum: 2 maximum: 2

The gift card holder's two-character country code. Use the ISO-3166 official country codes.

**amount** `JSON Array` `Required`

**amount** `number` `Required` minimum: 0

The amount of money sent for authorization.

**currencyCode** `String` `Required` minimum: 3 maximum: 3

Three letter ISO 4217 currency code for this discounted amount.

**merchantName** `String` `Required`

The name of the merchant.

**brandName** `String` `Required` pattern: Amex / Discover / Visa / MC

The brand name of the card issuer.

**payPal** `JSON Array` `Conditional`

**billingAddress** `JSON Array` `Required`

**firstName** `String` `Required` minimum: 1 maximum: 20

The cardholder's first name of the consumer listed on the payPal account.

**lastName** `String` `Required` minimum: 1 maximum: 20

The cardholder's last name of the consumer listed on the payPal account.

**addressLine1** `String` `Required` minimum: 1 maximum: 60

The payPal account holder's address, line 1.

**addressLine2** `String` `Optional` minimum: 1 maximum: 60

The payPal account holder's address, line 2.

**unitNumber** `String` `Optional` minimum: 0 maximum: 5

The payPal account holder's address unit number.

**buildingNumber** `String` `Optional`

The payPal account holder's address building number.

**streetOrBlock** `String` `Optional`

The payPal account holder's address street or block indication.

**neighborhood** `String` `Optional`

The payPal account holder's address neighborhood indication.

**city** `String` `Required` minimum: 1 maximum: 30

The payPal account holder's city.

**regionCode** `String` `Required` minimum: 1 maximum: 30

The payPal account holder's region name. For U.S. addresses, use the two-character state code.

**postalCode** `String` `Required` minimum: 1 maximum: 10

The payPal account holder's zip or postal code.

**countryCode** `String` `Required` minimum: 2 maximum: 2

The payPal account holder's two-character country code. Use the ISO-3166 official country codes.

**amount** `JSON Array` `Required`

**amount** `number` `Required` minimum: 0

The amount of money sent for authorization.

**currencyCode** `String` `Required` minimum: 3 maximum: 3

Three letter ISO 4217 currency code for this discounted amount.

**payPalPayerId** `String` `Required`

The payPal account identification.

**shipping** `JSON Array` `Required`

**deliveryMethod** `String` `Required` pattern: Mail / Physical / Virtual

The type of delivery method used.

**carrier** `String` `Optional` pattern: UPS / FedEx / DHL / Postal Company / Other

The carrier used for the transaction.

**date** `String` `Optional` format: yyyy-mm-dd

Customer's order number for this transaction.

**shippingClass** `String` `Optional` pattern: Air / Sea / Rail / Freight / Ground / Other

The shipping method for this transaction.

**amount** `JSON Array` `Required`

**amount** `number` `Required` minimum: 0

The amount of money sent for authorization.

**currencyCode** `String` `Required` minimum: 3 maximum: 3

Three letter ISO 4217 currency code for this discounted amount.

**shippingAddress** `JSON Array` `Optional`

**firstName** `String` `Required` minimum: 1 maximum: 20

The contact's first name for this shipping address.

**lastName** `String` `Required` minimum: 1 maximum: 20

The contact's last name for this shipping address.

**addressLine1** `String` `Required` minimum: 1 maximum: 60

The shipping address, line 1.

**addressLine2** `String` `Optional` minimum: 1 maximum: 60

The shipping address, line 2.

**unitNumber** `String` `Optional` minimum: 0 maximum: 5

The shipping address unit number.

**buildingNumber** `String` `Optional`

The shipping address building number.

**streetOrBlock** `String` `Optional`

The shipping address street or block indication.

**neighborhood** `String` `Optional`

The shipping address neighborhood indication.

**city** `String` `Required` minimum: 1 maximum: 30

The shipping address city.

**regionCode** `String` `Required` minimum: 1 maximum: 30

The shipping address region name. For U.S. addresses, use the two-character state code.

**postalCode** `String` `Required` minimum: 1 maximum: 10

The shipping address zip or postal code.

**countryCode** `String` `Required` minimum: 2 maximum: 2

The shipping address two-character country code. Use the ISO-3166 official country codes.

**pickupLocation** `String` `Optional` pattern: Drop-off / Curbside / Store / Warehouse / Other

The pickup location for this transaction.

**pickupTime** `String` `Optional` format: hh:mm

The time of pickup for this transaction.

**phoneNumber** `String` `Optional` format: 111-111-1234

The contact phone number for this transaction.

**email** `String` `Optional`

> The contact email address for this transaction.

**customData** `JSON Array` `Optional`

> This array allows for passing and validation of custom fields.

> **key** `String` `Required`

> **value** `String` `Required`

> **valueType** `String` `Required` pattern: Boolean / Double / Integer / LocalDateTime / String

> **isRequired** `Boolean` `Required` pattern: true / false

> **minRange** `Integer` `Optional` Note: Required only for Double / Integer / String. Ignored for others.

> **maxRange** `String` `Optional` Note: Required only for Double / Integer / String. Ignored for others.

> **description** `String` `Required`

> **displayName** `String` `Required`

**transactionEvaluationStep** `String` `Required` pattern: OneStepPostAuth / PreAuth / PostAuth

> An indicator of which step in the evaluation process this call is associated with. There are two process options available for how this API can be utilized: one-step or two-step. The recommended option is the two-step as this option provides cart updates as they are happening, prior to the bank authorization which results in ongoing feedback and a faster evaluation decision. In the two-step process the first evaluate API call is made prior to the payment gateway/issuer authorization and is indicated via the PreAuth indicator. The second API call in the two-step process occurs once you have received the payment gateway/issuer authorization. This second API call in the two-step process is indicated by selecting the PostAuth designation in this field. In the one-step option this API is called using the OneStepPostAuth indication and is issued after the payment gateway/issuer has authorized the transaction

## Response Fields

**apiVersion** `String`

> Version of the API used for this request.

**time** `String` format: yyyy-mm-dd hh:mm:ss.sss

> The date and time (in UTC) this transaction was processed.

**data** `JSON Array`

> **transactionId** `String`

The unique identification for this transaction. This Id should be used for all future API calls related to this transaction.

**score** `Integer`

For Payment Protect, returns the risk score associated with the transaction. Valid values are 0-100; the higher the score, the greater the fraud risk associated with the transaction.

**evaluationDecision** `String`

The returned response is first dependent on the product being used:

Payment Guarantee: Guaranteeable / Guaranteed / Not Guaranteed

Payment Protect: Very Safe, Safe, Moderate, Risky, Very Risky

**scoreInsights** `JSON Array`

   **description** `String`

   These are positive and negative reasons that elaborate on the decision taken for this transaction.

## Response Codes

| Response Code | Description |
| --- | --- |
| 200 | ok |
| 400 | Bad Request |
| 401 | Unauthorized |
| 403 | Forbidden |
| 412 | Precondition Failed |
| 415 | Unsupported Media Type |
| 500 | Internal Server Error |

# `PATCH` **/api/v1/transactions/transactionStatus**

This API is used to provide the final disposition status of this transaction.

## Request Body

**paymentStatus** `String` `Required` pattern: Accepted / Captured / Declined / Issuer Declined / Voided

The payment status for this transaction.

**orderNumber** `String` `Required`

> Customer's order number for this transaction.

**transactionId** `String` `Required`

> The unique identification for this transaction.

**orderStatus** `String` `Required` pattern: Cancelled / Paid / Partially Paid / Fulfilled

> The final order status for this transaction.

**comments** `String` `Optional`

> Any optional comments that are significant and relative to this transaction and its order status.

## Response Fields

**apiVersion** `String`

> Version of the API used for this request.

**time** `String` format: yyyy-mm-dd hh:mm:ss.sss

> The date and time (in UTC) this transaction was processed.

**data** `JSON Array`

> **orderStatus** `String` pattern: Approved / Cancelled / Created / Declined / Error / Paid / Pending
>
> > The status of the for this transaction.
>
> **paymentStatus** `String`
>
> > The payment status for this transaction.

## Response Codes

| Response Code | Description |
| --- | --- |
| 200 | ok |
| 400 | Bad Request |
| 401 | Unauthorized |
| 403 | Forbidden |
| 412 | Precondition Failed |
| 415 | Unsupported Media Type |
| 500 | Internal Server Error |

# Chargeback Submission

# **POST** **/api/v1/transactions/event/chargeback**

This API is used to submit chargeback information related to a transaction. Chargeback submissions must be provided for guaranteed transactions via the Payment Guarantee product if the subscriber wishes a reimbursement. Chargeback submissions for other events can and should be submitted for improved tracking purposes. Subscribers submitting these events will be able to view and manage these through the Vesta Console.

## Request Header

**customerId** `Integer` `Optional`

> The customer identifier.

## Request Body

**orderNumber** `String` `Optional`

> Original customer order number for the chargeback claim.

**transactionId** `String` `Required`

> The unique identification for this transaction.

**chargebackId** `String` `Optional`

> The chargeback identification for this transaction.

**paymentId** `String` `Required`

> The original payment identification for the chargeback claim.

**date** `String` `Required` format: yyyy-mm-dd

> The date this chargeback was claimed.

**amount** `JSON Array` `Required`

> **amount** `number` `Required` minimum: 0
>
> > The amount of money for this chargeback claim.
>
> **currencyCode** `String` `Required` minimum: 3 maximum: 3
>
> > Three letter ISO 4217 currency code for this chargeback claim.

**reasonCode** `String` `Required`

The acquirer issued reason code for the chargeback. Available values will depend on the merchant/acquirer account.

**description** `String` `Required`

The description for the chargeback reason.

**status** `String` `Required` pattern: Refunded / Partially Refunded / Disputed / Represented / Chargeback Accepted / Chargeback Reversed / Charged Back

The current status for the chargeback claim.

**purchaserName** `String` `Optional`

The name of the purchaser for the chargeback claim.

**fee** `JSON Array` `Optional`

   **amount** `number` `Required` minimum: 0

   The fee amount of servicing this chargeback claim.

   **currencyCode** `String` `Required` minimum: 3 maximum: 3

   Three letter ISO 4217 currency code for this chargeback amount.

**additionalFee** `JSON Array` `Optional`

   **amount** `number` `Required` minimum: 0

   The amount of additional fees for this chargeback claim.

   **currencyCode** `String` `Required` minimum: 3 maximum: 3

   Three letter ISO 4217 currency code for this additional chargeback fee amount.

**claimedBy** `String` `Optional`

The name of the individual who claimed for the chargeback claim.

**caseNumber** `String` `Optional`

The acquirer generated case number for the chargeback claim.

**customerId** `Integer` `Optional`

The customer identifier associated to the original transaction.

**attachments** `JSON Array` `Optional`

   **attachmentName** `String` `Optional`

   The name of the attachment that provides evidence of the chargeback claim.

   **attachmentURL** `String` `Optional`

The URL foe the file that provides evidence of the chargeback claim.

## Response Fields

**apiVersion** `String`

Version of the API used for this request.

**time** `String` format: yyyy-mm-dd hh:mm:ss.sss

The date and time (in UTC) this transaction was processed.

**data** `JSON Array`

**message** `String`

A brief message describing the result of the chargeback request.

## Response Codes

| Response Code | Description |
|---|---|
| 200 | ok |
| 400 | Bad Request |
| 401 | Unauthorized |
| 403 | Forbidden |
| 412 | Precondition Failed |
| 415 | Unsupported Media Type |
| 500 | Internal Server Error |

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## Refund Submission

# POST /api/v1/transactions/event/refunds

This API is used to submit refund information, such as refunded or voided, related to a transaction. Subscribers submitting these events will be able to view and manage these through the Vesta Console.

## Request Body

**orderNumber** `String` `Optional`

Original customer order number for the refund notice.

**transactionId** `String` `Required`

The Vesta generated unique identification for the original transaction.

**refundId** `String` `Required`

The refund identification for this transaction.

**paymentId** `String` `Required`

The original payment identification for the refund notice.

**date** `String` `Required` format: yyyy-mm-dd

The date this refund was claimed.

**amount** `JSON Array` `Required`

> **amount** `number` `Required` minimum: 0
>
> > The amount of money for this refund.
>
> **currencyCode** `String` `Required` minimum: 3 maximum: 3
>
> > Three letter ISO 4217 currency code for this refund.

**description** `String` `Required`

The description for the refund.

## Response Fields

**apiVersion** `String`

Version of the API used for this request.

**time** `String` format: yyyy-mm-dd hh:mm:ss.sss

The date and time (in UTC) this transaction was processed.

**data** `JSON Array`

> **message** `String`
>
> > A brief message describing the result of the chargeback request.

## Response Codes

| Response Code | Description |
|---|---|
| 200 | ok |
| 400 | Bad Request |

| | |
|---|---|
| 401 | Unauthorized |
| 403 | Forbidden |
| 412 | Precondition Failed |
| 415 | Unsupported Media Type |
| 500 | Internal Server Error |