pipwave API

# Revisions

|  |  |  |  |
| --- | --- | --- | --- |
| Revision | Performed by | Date and Time | Comment |
| Initial draft | Darren Ng | 17/2/2016 | Initial draft |
| R1.0 | Darren Ng | 2/11/2016 | Added API Key and API Secret section.  Updated parameters. |
|  |  |  |  |

# URL

All API has the same URL, which is:

* Live Environment: https://api.pipwave.com/payment
* Test Environment: https://staging-api.pipwave.com/payment

In order to execute the API of older version, calls must be made instead to (eg v1):

* Live Environment: https://api.pipwave.com/v1/payment
* Test Environment: https://staging-api.pipwave.com/v1/payment

# Security

## Timestamping

Each API will require a timestamp to be attached. This timestamp has to be in UNIX integer format with timezone GMT+0. For eg: 1456790400 = 2016-03-01 00:00:00 (GMT+0).

See http://www.unixtimestamp.com/index.php for more details.

## Signature

Signature generation is dependant on the APIs being called. Some API do not require signature, while others require. Note the “Signature” section for each API for the list of data required to be included for signature generation.

For those API which require signature, signature can be generated by following PHP example:

|  |
| --- |
| function generateSignature($array) {  ksort($array);  $s = "";  foreach($array as $key => $value) {  $s .= $key . ':' . $value;  }  return sha1($s);  } |

Put the resulting string in “signature” parameter when making the API request.

## SSL

All APIs must be called via SSL

## API Key

All calls must include the api\_key parameter (which will be reminded in individual API documents). In addition to including this parameter in the request body, every request must also contain the **x-api-key** header which contains the same key. This allows us to quickly verify the authenticity of the request before proceeding to process the API request. The API Key can be obtained from Merchant portal > Development > Setting page.

## API Secret

When signature is required to be generated, API Secret will be used to determine authenticity. The API Secret can also be obtained from Merchant portal > Development > Setting page.

# API List

## Initiate Payment

Used when submitting payment for initiation. It could be used during direct API integration or via SDK / Button integration. Payment initiation must be done before payment information can be submitted via Submit Payment Information API call. The Request data of this API call is very similar to Submit Payment Information API call, differences being:

1. amount, currency\_code and many other order-related parameters are not in Submit Payment Information API call
2. payment\_method\_code and extra payment parameters within payment\_info is not a parameter in Initiate Payment API call
3. txn\_id must be provided by Initiate Payment API call, and pw\_id must be provided by Submit Payment Information API call, being a pair from Initiate Payment API call
4. Any other overlapping parameters from Submit Payment Information API call will overwrite the data within Initiate Payment API call

**Method**: POST

**Action**: initiate-payment

### Request

**Format**: POST data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Required** | **Remark** | **Sample** |
| action | string | 32 | **Yes** | The action of this call, must be hardcoded to “initiate-payment” | initiate-payment |
| timestamp | timestamp | - | **Yes** | The timestamp for this API call |  |
| api\_key | string | 32 | **Yes** | pipwave-assigned merchant’s API key | 123456 |
| txn\_id | string | 32 | **Yes** | Unique merchant’s transaction ID | 123456 |
| amount | decimal | 11, 2 | **Yes** | The payment amount | 123 |
| tax\_exempted\_amount | decimal | 11, 2 | No | How much of the payment amount is tax-exempted; Defaults to 0, must be less than or equals to amount | 123 |
| currency\_code | string | 3 | **Yes** | The payment currency. Follow ISO 4217 standard. | MYR |
| short\_description | string | 255 | No | Short/summary description of the payment | Payment for games. |
| prefered\_payment | string | 255 | No | Comma-delimited allowable checkout payment methods to be shown to buyer. Setting this overrides and ignores “prefered\_category” and “exclude\_payment” parameter. Refer to appendix for list of possible values. | paypal |
| exclude\_payment | string | 255 | No | Comma-delimited payment methods to be excluded from being shown to buyer. Refer to appendix for list of possible values. | skrill,ipay88 |
| prefered\_category | string | 255 | No | Comma-delimited allowable checkout payment channels to be shown to buyer. Refer to appendix for list of possible values. | e-wallet,e-banking |
| payment\_info | key-value |  | | |  |
| payment\_info.subscription | boolean | - | No | Default: false | true |
| payment\_info.subscription\_frequency | string | 32 | No | If subscription = true, this parameter becomes required; otherwise it is ignored. Specifies the frequency the subscription fee will be charged again. Refer to appendix for list of possible values.  MONTHLY - Charge monthly based on payment\_info.subscription\_monthly\_charge\_day parameter  MANUAL - Manually charge the buyer whenever necessary, from the Merchant portal or via On\_Demand Subscription Payment API call | MONTHLY |
| payment\_info.subscription\_monthly\_charge\_day | unix datetime | - | No | If subscription is monthly, this parameter becomes required; otherwise it is ignored. Specifies the next date for charging, in GMT+0. After that, subsequent monthly charge will be based on this date. | 2016-03-01 00:00:00 |
| session\_info | key-value |  | | | |
| session\_info.ip\_address | string | 45 | No | Buyer’s IP address, for anti-fraud purposes | 123.123.123.123 |
| session\_info.session\_id | string | 255 | No | Buyer’s session ID with the merchant website, for anti-fraud purposes | yVPWBgovdzwTvJExDFr2hc10IdGlsdCj |
| session\_info.language | string | 5 | No | Default: en-gb, language to show to buyer. Refer to appendix for list of possible values. | en-gb |
| buyer\_info | key-value |  | | | |
| buyer\_info.id | string | 255 | **Yes** | Used to uniquely identify your buyer for order tagging and reporting purposes |  |
| buyer\_info.email | string | 255 | **Yes** | Buyer’s email address | john-doe@pipwave.com |
| buyer\_info.first\_name | string | 255 | No | Buyer’s first name | Doe |
| buyer\_info.last\_name | string | 255 | No | Buyer’s last name | John |
| buyer\_info.contact\_no | string | 255 | No | Buyer’s contact number | 123456789 |
| buyer\_info.contact\_no\_country\_iso2 | string | 2 | No | Buyer’s contact number country ISO2 | MY |
| buyer\_info.contact\_no\_country\_code | string | 3 | No | Buyer’s contact number country dialing code | 60 |
| buyer\_info.country\_code | string | 3 | **Yes** | Buyer’s country code ISO2 | MY |
| buyer\_info.processing\_fee\_group | string | 64 | No | Buyer’s processing fee group, refering to Merchant’s processing fee group group list Reference ID. If no match is found, no processing fee will be imposed. | gold |
| billing\_info | key-value |  | | | |
| billing\_info.name | string | 255 | No | Billing name | John Doe |
| billing\_info.address1 | string | 255 | No | Billing address | 1, Jalan John |
| billing\_info.address2 | string | 255 | No | Billing address |  |
| billing\_info.city | string | 255 | No | Billing address city | John Town |
| billing\_info.state | string | 255 | No | Billing address state | Selangor |
| billing\_info.zip | string | 255 | No | Billing address zip | 12345 |
| billing\_info.country | string | 255 | No | Billing address country | Malaysia |
| billing\_info.country\_iso2 | string | 2 | No | Billing country ISO2 | MY |
| billing\_info.contact\_no | string | 255 | No | Billing contact number |  |
| billing\_info.contact\_no\_country\_iso2 | string | 2 | No | Billing contact number country ISO2 | MY |
| billing\_info.email | string | 255 | No | Billing email address |  |
| shipping\_info | key-value |  | | | |
| shipping\_info.name | string | 255 | No | Shipping name | John Doe |
| shipping\_info.address1 | string | 255 | No | Shipping address | 1, Jalan John |
| shipping\_info.address2 | string | 255 | No | Shipping address |  |
| shipping\_info.city | string | 255 | No | Shipping address city | John Town |
| shipping\_info.state | string | 255 | No | Shipping address state | Selangor |
| shipping\_info.zip | string | 255 | No | Shipping address zip | 12345 |
| shipping\_info.country | string | 2 | No | Shipping address country | Malaysia |
| shipping\_info.country\_iso2 | string | 2 | No | Shipping country ISO2 | MY |
| shipping\_info.contact\_no | string | 255 | No | Shipping contact number |  |
| shipping\_info.contact\_no\_country\_iso2 | string | 2 | No | Shipping contact number country ISO2 | MY |
| shipping\_info.email | string | 255 | No | Shipping email address |  |
| item\_info | array | \* Only up to 20 values, 255 character length for each data | | | |
| item\_info.x.name | string | 255 | No | Product name | The Theory of Nothing |
| item\_info.x.description | string | 255 | No | Product description | When Hawking Stephen finds the true answer of everything, guess what he finds? |
| item\_info.x.amount | decimal | 11, 2 | No | Product unit price | 123 |
| item\_info.x.currency\_code | string | 3 | No | Currency code for particular item. Follow ISO 4217 standard. |  |
| item\_info.x.quantity | decimal | 11, 2 | No | Quantity of product being purchased | 1 |
| item\_info.x.tax\_amount | decimal | 11, 2 | No | Product total tax amount | 0 |
| item\_info.x.category | string | 128 | No | Physical / Digital |  |
| item\_info.x.is\_tangible\_good | boolean | - | No | Is it physical good? True, or false (for digital/virtual goods) | true |
| item\_info.x.sku | string | 255 | Yes\* | Product code, required if item info row exists | 123456 |
| subtotal\_info | array | \* Only up to 20 values, 255 character length for each data | | | |
| subtotal\_info.x.name | string | 255 | No | Subtotal label | Shipping Cost |
| subtotal\_info.x.value | decimal | 11, 2 | No | Subtotal amount | 0 |
| api\_override | key-value |  | | |  |
| api\_override.skip\_phone\_verification | boolean | - | No | Default: false; Indicate if the buyer’s phone must be verified (only if phone verification is turned on in Merchant center) | true |
| api\_override.notification\_url | string | 255 | No | Overriding of the notification url set in Merchant center, specifically for this transaction | https://merchant.com/notification.php |
| api\_override.success\_url | string | 255 | No | Overriding of the transaction successful URL set in Merchant center, specifically for this transaction | https://merchant.com/success.php |
| api\_override.fail\_url | string | 255 | No | Overriding of the transaction fail URL set in Merchant center, specifically for this transaction | https://merchant.com/fail.php |
| api\_override.redirect\_extra\_param1 | string | 255 | No | Extra data to be included with the success/fail redirect as GET parameters | 123456 |
| api\_override.redirect\_extra\_param2 | string | 255 | No | Extra data to be included with the success/fail redirect as GET parameters |  |
| api\_override.redirect\_extra\_param3 | string | 255 | No | Extra data to be included with the success/fail redirect as GET parameters |  |
| api\_override.notification\_extra\_param1 | string | 255 | No | Extra data to be included with the notification package | 123456 |
| api\_override.notification\_extra\_param2 | string | 255 | No | Extra data to be included with the notification package | abcdef |
| api\_override.notification\_extra\_param3 | string | 255 | No | Extra data to be included with the notification package |  |

#### Response

**Format**: JSON

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Remark** | **Sample** |
| status | string | 5 | Status of the request. Refer to appendix for list of possible values. | 0 |
| message | string | 255 | Error message, if any |  |
| token | string | 32 | pipwave’s payment token | abcdef |
| redirect\_url | string | 255 | The next redirect url |  |

### Signature

The data involved in generating the signature for this API are:

* timestamp
* action
* api\_key
* txn\_id
* amount
* currency\_code
* api\_secret

## Submit Payment Information

Used when submitting payment for finalization. It could be used during direct API integration or via SDK / Button integration. Many of the data is optional; If optional data is found to be required after submitting payment information, buyer will be redirected to a Pipwave-controlled page which collects the required information in merchant’s behalf. Initiate Payment API call must be done before payment information can be submitted via Submit Payment Information API call. The Request data of this API call is very similar to Initiate Payment API call, differences being:

1. amount, currency\_code and many other order-related parameters are not in Submit Payment Information API call
2. payment\_method\_code and extra payment parameters within payment\_info is not a parameter in Initiate Payment API call
3. pw\_id must be provided by Submit Payment Information API call, being a pair from Initiate Payment API call
4. Any other overlapping parameters from Submit Payment Information API call will overwrite the data within Initiate Payment API call

**Method**: POST

**Action**: submit-payment

### Request

**Format**: POST data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Required** | **Remark** | **Sample** |
| action | string | 32 | **Yes** | The action of this call, must be hardcoded to “submit-payment” | submit-payment |
| timestamp | timestamp | - | **Yes** | The timestamp for this API call |  |
| api\_key | string | 32 | **Yes** | pipwave-assigned merchant’s API key | 123456 |
| token | string | 32 | **Yes** | pipwave’s payment token | abcdef |
| payment\_method\_code | string | 32 | No**\*** | The payment method code that buyer selected. Refer to appendix for list of possible values. |  |
| payment\_info | key-value | \* Only up to 100 values, must be PG-specific | | |  |
| ….. | ….. | ….. | ….. | Any other payment information which specific PG requires |  |
| session\_info | key-value |  | | | |
| session\_info.ip\_address | string | 45 | No | Buyer’s IP address, for anti-fraud purposes | 123.123.123.123 |
| session\_info.language | string | 5 | No | Default: en-gb, language to show to buyer. Refer to appendix for list of possible values. | en-gb |
| buyer\_info | key-value |  | | | |
| buyer\_info.email | string | 255 | No | Buyer’s email address | john-doe@pipwave.com |
| buyer\_info.first\_name | string | 255 | No | Buyer’s first name | Doe |
| buyer\_info.last\_name | string | 255 | No | Buyer’s last name | John |
| buyer\_info.contact\_no | string | 255 | No | Buyer’s contact number | 123456789 |
| buyer\_info.contact\_no\_country\_code | string | 3 | No | Buyer’s contact number country | 60 |
| billing\_info | key-value |  | | | |
| billing\_info.name | string | 255 | No | Billing name | John Doe |
| billing\_info.address1 | string | 255 | No | Billing address | 1, Jalan John |
| billing\_info.address2 | string | 255 | No | Billing address |  |
| billing\_info.city | string | 255 | No | Billing address city | John Town |
| billing\_info.state | string | 255 | No | Billing address state | Selangor |
| billing\_info.zip | string | 255 | No | Billing address zip | 12345 |
| billing\_info.country | string | 255 | No | Billing address country ISO2 | Malaysia |
| billing\_info.country\_iso2 | string | 2 | No | Billing country ISO2 | MY |
| billing\_info.contact\_no | string | 255 | No | Billing contact number |  |
| billing\_info.contact\_no\_country\_iso2 | string | 2 | No | Billing contact number country ISO2 | MY |
| billing\_info.email | string | 255 | No | Billing email address |  |
| shipping\_info | key-value |  | | | |
| shipping\_info.name | string | 255 | No | Shipping name | John Doe |
| shipping\_info.address1 | string | 255 | No | Shipping address | 1, Jalan John |
| shipping\_info.address2 | string | 255 | No | Shipping address |  |
| shipping\_info.city | string | 255 | No | Shipping address city | John Town |
| shipping\_info.state | string | 255 | No | Shipping address state | Selangor |
| shipping\_info.zip | string | 255 | No | Shipping address zip | 12345 |
| shipping\_info.country | string | 2 | No | Shipping address country | Malaysia |
| shipping\_info.country\_iso2 | string | 2 | No | Shipping country ISO2 | MY |
| shipping\_info.contact\_no | string | 255 | No | Shipping contact number |  |
| shipping\_info.contact\_no\_country\_iso2 | string | 2 | No | Shipping contact number country ISO2 | MY |
| shipping\_info.email | string | 255 | No | Shipping email address |  |

**\*** - Not required for direct API, but SDK will automatically populate based on buyer’s selections

### Response

**Format**: JSON

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Remark** | **Sample** |
| status | string | 5 | Status of the request. Refer to appendix for list of possible values. | 0 |
| message | string | 255 | Error message, if any |  |
| redirect\_url | string | 255 | The next redirect url | https://merchant.com/success.php?pw\_id=123456&extra\_param1=123456 |
| payment\_status | string | 5 | Status of the payment. Refer to appendix for list of possible values. |  |
| payment\_reason | string | 255 | The reason why the PG status is not successful |  |

### Signature

There is no need to include signature in this API call.

## Requery

Used to get the latest status of the payment.

**Method**: POST

**Action**: requery

### Request

**Format**: POST data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Required** | **Remark** | **Sample** |
| action | string | 32 | **Yes** | The action of this call, must be hardcoded to “requery” | requery |
| timestamp | timestamp | - | **Yes** | The timestamp for this API call |  |
| api\_key | string | 32 | **Yes** | pipwave-assigned merchant’s API key | 123456 |
| pw\_id | string | 32 | No | pipwave’s transaction reference ID, either this or txn\_id must be sent | 123456 |
| txn\_id | string | 255 | No | Merchant’s transaction ID, either this or pw\_id must be sent | 123456 |

### Response

**Format**: JSON

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Remark** | **Sample** |
| status | string | 5 | Status of the request. Refer to appendix for list of possible values. | 0 |
| message | string | 255 | Error message, if any |  |
| api\_key | string | 255 | pipwave-assigned merchant’s API key | 123456 |
| pw\_id | string | 255 | pipwave reference transaction ID | 123456 |
| txn\_id | string | 255 | Merchant’s transaction ID, either this or pw\_id must be sent |  |
| amount | decimal | 11, 2 | The payment checkout amount | 123 |
| tax\_exempted\_amount | decimal | 11, 2 | The tax-exempted amount from the payment checkout amount | 0 |
| processing\_fee\_amount | decimal | 11, 2 | The processing fee amount | 1.2 |
| tax\_amount | decimal | 11, 2 | The tax amount | 2.4 |
| total\_amount | decimal | 11, 2 | The total amount for the payment | 126.6 |
| final\_amount | decimal | 11, 2 | Final amount for this transaction (after potential chargeback / refund / adjustments) | 126.6 |
| currency\_code | string | 3 | The payment currency. Follow ISO 4217 standard. | MYR |
| subscription\_token | string | 32 | If payment is subscription type, this data is pipwave’s subscription payment token | 123456 |
| charge\_index | integer | - | Charging index, only subscription payments will include this data, 1 indicates initial payment, subsequent number indicates subsequent charges, in sequence | 1 |
| payment\_method\_code | string | 32 | The payment method code that buyer selected. Refer to appendix for list of possible values. | 123456 |
| reversible\_payment | boolean | - | Is the payment method reversible? |  |
| require\_capture | boolean | - | Does this transaction require capture? |  |
| transaction\_status | string | 5 | Status of the payment as stored by pipwave. Refer to appendix for list of possible values. | 20160101120000 |
| aft\_score | integer | 3 | The fraud risk rating for this transaction as processed by pipwave |  |
| aft\_status | string | 16 | The suggested action to undertake for this transaction, can be one of “approve”, “decline” or “review” | approve |
| extra\_param1 | string | 255 | Extra notification parameter that was configured when Submit Payment Information API is being called | 123456 |
| extra\_param2 | string | 255 | Extra notification parameter that was configured when Submit Payment Information API is being called | abcdef |
| extra\_param3 | string | 255 | Extra notification parameter that was configured when Submit Payment Information API is being called |  |

### Signature

The data involved in generating the signature for this API are:

* timestamp
* action
* api\_key
* pw\_id OR txn\_id
* api\_secret

## Refund

Used to trigger refund process for a particular pw\_id.

**Method**: POST

**Action**: refund

### Request

**Format**: POST data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Required** | **Remark** | **Sample** |
| action | string | 32 | **Yes** | The action of this call, must be hardcoded to “refund” | refund |
| op | string | 32 | **Yes** | The sub-action of this call - initiate or submit | initiate |
| timestamp | timestamp | - | **Yes** | The timestamp for this API call |  |
| api\_key | string | 32 | **Yes** | pipwave-assigned merchant’s API key | 123456 |
| pw\_id | string | 32 | **Yes**\* | pipwave’s transaction reference ID, either this or txn\_id must be sent | 123456 |
| txn\_id | string | 255 | **Yes**\* | Merchant’s transaction ID, either this or pw\_id must be sent | 123456 |
| refund\_amount | decimal | 11, 2 | No | If not provided, full refund will be affected |  |
| extra\_param | string | 255 | No | Extra params which is required by payment method to process the refund, in JSON format |  |

### Response

**Format**: JSON

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Remark** | **Sample** |
| status | string | 5 | Status of the request. Refer to appendix for list of possible values. | 0 |
| message | string | 255 | Error message, if any |  |

### Signature

The data involved in generating the signature for this API are:

* timestamp
* action
* api\_key
* op
* pw\_id, if provided
* txn\_id, if provided
* refund\_amount, if provided
* extra\_param, if provided
* api\_secret

## Capture Payment

Used to capture credit card payment eg. Adyen if merchant opt for manual capture in payment settings. The capture API will only fired if the transaction is still under AUTHORISATION status.

**Method**: POST

**Action**: capture-payment

### Request

**Format**: POST data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Required** | **Remark** | **Sample** |
| action | string | 32 | **Yes** | The action of this call, must be hardcoded to “capture-payment” | capture-payment |
| timestamp | timestamp | - | **Yes** | The timestamp for this API call |  |
| api\_key | string | 32 | **Yes** | pipwave-assigned merchant’s API key | 123456 |
| pw\_id | string | 32 | **Yes** | pipwave’s transaction reference ID, either this or txn\_id must be sent | 123456 |
| txn\_id | string | 255 | No | Merchant’s transaction ID, either this or pw\_id must be sent | 123456 |
| capture\_amount | decimal | 11, 2 | No | If not provided, full authorised amount will be captured. If PG not supporting partial capture, full capture will be done instead. |  |

### Response

**Format**: JSON

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Remark** | **Sample** |
| status | string | 5 | Status of the request. Refer to appendix for list of possible values. | 0 |
| message | string | 255 | Error message, if any |  |

### Signature

The data involved in generating the signature for this API are:

* timestamp
* action
* api\_key
* pw\_id
* txn\_id, if provided
* capture\_amount, if provided
* Api\_secret

## Tag Chargeback Payment

Used to tag payment as chargeback when Merchants receive chargeback notifications via email or other communication channels. Can also be used to finalize a chargeback or revert a chargeback. Only Payments with PAID or PARTIALLY REFUNDED state can be chargeback.

**Method**: POST

**Action**: tag-chargeback

### Request

**Format**: POST data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Required** | **Remark** | **Sample** |
| action | string | 32 | **Yes** | The action of this call, must be hardcoded to “tag-chargeback” | tag-chargeback |
| timestamp | timestamp | - | **Yes** | The timestamp for this API call |  |
| api\_key | string | 32 | **Yes** | pipwave-assigned merchant’s API key | 123456 |
| pw\_id | string | 32 | **Yes**\* | pipwave’s transaction reference ID, either this or txn\_id must be sent | 123456 |
| txn\_id | string | 255 | **Yes**\* | Merchant’s transaction ID, either this or pw\_id must be sent | 123456 |
| stage | string | 32 | **Yes** | The stage of chargeback : either “dispute”, “chargeback” or “chargeback reversed”. Payments from PAID or PARTIALLY REFUNDED state can be chargeback-finalized directly. | initiated |
| reason | string | 32 | **Yes\*** | The reason that the Payment Gateway provided : either “unauthorized”, “non\_receipt”, “not\_as\_described” or “others”. If this reference is being initialized, then this parameter is required. | unauthorized |

### Response

**Format**: JSON

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Remark** | **Sample** |
| status | string | 5 | Status of the request. Refer to appendix for list of possible values. | 0 |
| message | string | 255 | Error message, if any |  |

### Signature

The data involved in generating the signature for this API are:

* timestamp
* action
* api\_key
* pw\_id, if provided
* txn\_id, if provided
* stage
* api\_secret

# Instant Payment Notification

A notification is sent to merchant’s server when the payment status is updated. The target URL the notification is sent to is configured in the merchant portal, and it can be overwritten when calling Submit Payment Information API. IPN must be responded with an “OK” message from the target URL; A fallback mechanism will send the notification every 5 minutes until the target URL responds with “OK”.

**Method**: POST

### Request

**Format**: POST-JSON

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Datatype** | **Length** | **Remark** | **Sample** |
| status | string | 5 | Status of the request. Refer to appendix for list of possible values. | 0 |
| message | string | 255 | Error message, if any |  |
| api\_key | string | 255 | pipwave-assigned merchant’s API key | 123456 |
| notification\_id | string | 32 | The unique notification ID | 123456 |
| notification\_date | timestamp | - | When the notification was sent | 1451606395 |
| pw\_id | string | 255 | pipwave reference transaction ID | 123456 |
| txn\_id | string | 255 | Merchant’s transaction ID |  |
| amount | decimal | 11, 2 | The payment checkout amount | 123 |
| tax\_exempted\_amount | decimal | 11, 2 | The tax-exempted amount from the payment checkout amount | 0 |
| surcharge\_amount | decimal | 11, 2 | The surcharge amount | 1.2 |
| tax\_amount | decimal | 11, 2 | The tax amount | 2.4 |
| total\_amount | decimal | 11, 2 | The total amount for the payment | 126.6 |
| final\_amount | decimal | 11, 2 | Final amount for this transaction (after potential chargeback / refund / adjustments) | 126.6 |
| currency\_code | string | 3 | The payment currency. Follow ISO 4217 standard. | MYR |
| transaction\_status | string | 5 | Status of the payment as stored by pipwave. Refer to appendix for list of possible values. |  |
| type | string | 32 | The type of this transaction - payment, refund or chargeback |  |
| subscription\_token | string | 32 | If payment is subscription type, this data is pipwave’s subscription payment token | 123456 |
| charge\_index | integer | - | Charging index, only subscription payments will include this data, 1 indicates initial payment, subsequent number indicates subsequent charges, in sequence | 1 |
| payment\_method\_code | string | 32 | The payment method code that buyer selected. Refer to appendix for list of possible values. | 123456 |
| reversible\_payment | boolean | - | Is the payment method reversible? |  |
| require\_capture | boolean | - | Does this transaction require capture? |  |
| mobile\_number | string | 255 | Buyer’s mobile number as verified |  |
| mobile\_number\_verification | boolean | - | Did the verification succeed? |  |
| pg\_status | string | 5 | Status of the payment as reported by PG. Refer to appendix for list of possible values. | 0 |
| pg\_reason | string | 255 | The reason why the PG status is not successful |  |
| pg\_date | timestamp | - | When the payment was effected | 1451606400 |
| pg\_raw\_data | string | - | JSON of original PG response | [] |
| aft\_score | integer | 3 | The fraud risk rating for this transaction as processed by pipwave |  |
| aft\_status | string | 16 | The suggested action to undertake for this transaction, can be one of “approve”, “decline” or “review” | approve |
| extra\_param1 | string | 255 | Extra IPN parameter that was configured when Submit Payment Information API is being called | 123456 |
| extra\_param2 | string | 255 | Extra IPN parameter that was configured when Submit Payment Information API is being called | abcdef |
| extra\_param3 | string | 255 | Extra IPN parameter that was configured when Submit Payment Information API is being called |  |

#### Signature

The data involved in generating the signature for this API are:

* timestamp
* api\_key
* pw\_id
* txn\_id
* amount
* currency\_code
* transaction\_status
* api\_secret

# Appendix

## API Status Code

|  |  |
| --- | --- |
| API Code | Reason |
| 200 | OK |
| 400 | Failed to fulfill request, see message |
| 401 | Invalid API signature |
| 403 | Invalid API key |
| 404 | Invalid action |
| 500 | Generic server error, see message |
| 1001 | Currency not offered by Merchant |
| 1002 | Transaction ID (txn\_id) duplicate |
| 2001 | Unsupported payment method, see message |
| 2002 | Token has expired |
| 3001 | Payment is already fully refunded |
| 3002 | Payment not finalized yet |
| 3003 | Refunded amount is more than current amount |
| 3004 | Refund not supported |
| 3005 | Partial refund not supported |
| 3006 | The transaction already has a reversal in process. You must wait for the process to complete first. |
| 3501 | No disputed chargeback transaction to reversed |
| 9001 | Parameter error, see message |

## Payment Status Code

### Payment Transaction

|  |  |
| --- | --- |
| Status | Description |
| 0 | Pending |
| 1 | Failed |
| 2 | Cancelled |
| 5 | Processing |
| 10 | Paid |
| 13 | Disputed |
| 15 | Chargeback |
| 20 | Full refund |
| 25 | Partial refund |

### Refund Transaction

|  |  |
| --- | --- |
| Status | Description |
| 1 | Pending |
| 5 | Failed |
| 10 | Successful |

### Chargeback Transaction

|  |  |
| --- | --- |
| Status | Description |
| 1 | Pending |
| 6 | Successful |
| 10 | Chargeback Reversed |