



**API SPECIFICATIONS
FOR
HOSTED PAYMENT PAGE
+
3 ENDPOINTS
+
GENERAL OPERATIONAL FUNCTIONS
INTEGRATION**

(Version 13.86)

Last updated on 6th March 2025

| RAZER MERCHANT SERVICES | |
|---|--|
|    | <p>J-39-1, Block J, Persiaran Multimedia, i-City, 40000 Shah Alam, Selangor, Malaysia.</p> <p>+ (603) - 5521 8438</p> <p>support@Fiuu.com</p> <p>Fiuu.com</p>  |
| | <p>Social Networks</p> <p> https://twitter.com/FiuuPayment https://facebook.com/FiuuPayment https://youtube.com/@FiuuPayment https://instagram.com/FiuuPayment https://linkedin.com/company/FiuuPayment </p> |
| | <p>Developer Platforms</p> <p> https://t.me/FiuuDeveloperForum (for tech support) https://github.com/FiuuPayment Mobile XDK, seamless and in-page checkout, and many shopping carts payment plugin/module/addon/extension are available </p> |
|  |  |

ChangeLogs

| Date | Version | Description |
|------------|---------|---|
| 2014/05/16 | v11.0 | Formalize the document |
| 2014/06/14 | v12.0 | Simplified and consolidating API documents |
| 2016/10/24 | v13.0 | Declare EOL of inactive channels |
| 2016/12/03 | v13.3 | Introduce secret key and changed of some critical APIs hashing based on secret key |
| 2017/09/08 | v13.6 | Removal of obsoleted channels |
| 2017/10/10 | v13.7 | Splitting payment and non-payment request endpoint FQDN, adding sandbox URL |
| 2018/05/31 | v13.8 | Adding Pick-n-Pay APIs |
| 2018/08/20 | v13.9 | Adding card BIN info API |
| 2019/01/04 | v13.9 | Update value of channel in return URL, withdraw Pay-n-Pick from this document |
| 2019/04/30 | v13.9 | Rebranding to Razer Merchant Services |
| 2019/05/07 | v13.10 | Withdrawal of escrow and mass payout APIs |
| 2019/06/17 | v13.11 | Adding currency & error code/desc to requery APIs response |
| 2019/09/20 | v13.12 | Transferring predefined bank and FTT list to Razer Escrow & Mass Payout API |
| 2019/11/29 | v13.13 | Adding Taiwan payment channels, removing EOL channels table |
| 2020/01/09 | v13.14 | Adding eWallet channel (GrabPay, Maybank QRPAY), 51 currencies supported for multi-currency card acceptance |
| 2020/03/24 | v13.14 | Update Settlement Report API version 3.0 to 4.0 that includes refund and chargeback records |
| 2020/08/27 | v13.15 | Adding Thailand credit card channel. |
| 2020/09/18 | v13.16 | Changing all API FQDN to Razer domain; Enhanced settlement report API to support duration in seconds from a specific time |
| 2020/10/02 | v13.16 | Minor enhancement on the daily transaction report API to include all optional fields |
| 2020/11/06 | v13.17 | Adding Cash-TH channel |
| 2020/11/24 | v13.18 | Adding Cash-KKmart channel |
| 2021/01/07 | v13.19 | Adding ShopeePay channel |
| 2021/01/14 | V13.20 | Adding new FPX B2C & B2B channels (Agrobank, Citibank, UOB, Bank Rakyat, Affin, and etc.) |
| 2021/01/29 | V13.21 | Minor enhancement on daily transaction report and Capture Request API |
| 2021/03/10 | v13.22 | Adding/removing of payment channel's error code table |
| 2021/06/09 | v13.23 | Adding DuitNow group channel, additional optional billing info, and update Thailand channel |
| 2021/07/01 | v13.23 | Adding AppDeeplink parameter to payment request |

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|------------|--------|--|
| 2021/07/13 | v13.24 | Adding Singapore PayNow |
| 2021/07/28 | v13.24 | Adding eNets Debit error code & removing Razer Pay |
| 2021/08/24 | v13.25 | Changing all www.onlinepayment.com.my to pay.fiuu.com |
| 2021/08/27 | v13.26 | Adding installment channels |
| 2021/10/15 | v13.26 | - Rectified the key used in FOREX API - Adding KBank PayPlus error codes - Releasing channel value in callback and notification messages |
| 2021/10/28 | v13.26 | - Adding KTB_IB & SCB_IB error codes |
| 2021/11/03 | v13.26 | - Adding Crypto_tripleA |
| 2021/11/23 | v13.27 | - Adding IOUPay - Adding Doku |
| 2021/12/14 | v13.28 | Adding RPP DuitNow and Alipay+ |
| 2022/02/15 | v13.29 | - Renaming "Notification URL" to "Notify URL" - Rewrite sample code for skey validation |
| 2022/02/22 | v13.30 | Adding LinePay TH |
| 2022/03/11 | v13.31 | Adding Atome |
| 2022/03/18 | v13.32 | Adding Token API |
| 2022/04/11 | v13.33 | - Add channel status API - Revamp the request parameter and response of token API - Change the existing channel status API to channel success rate API |
| 2022/04/26 | v13.34 | - Adding GCash - Adding Pace |
| 2022/05/05 | v13.35 | Adding 9PAY |
| 2022/05/19 | v13.36 | Adding waittime and cancelurl in request parameter Adding creditAN |
| 2022/06/10 | v13.37 | - Adding note for direct status requery API - Changing the data type of token API |
| 2022/07/25 | v13.38 | Adding creditAI |
| 2022/08/09 | v13.39 | Adding Maya channel |
| 2022/10/28 | v13.40 | Adding PromptPay RTP |
| 2022/11/09 | v13.41 | Adding BPI Channel |
| 2022/11/15 | v13.42 | Adding ESUN COD Family Mart |
| 2023/01/25 | v13.43 | - Isolating extraP to a new section - Adding Void non-cash payment API |
| 2023/02/15 | v13.44 | Adding hide_biller_info and hide_merchant_header_details in request parameter |

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|------------|--------|---|
| 2023/04/05 | v13.45 | - Change StatCode capture API from 22 to 23 to avoid confusion from "Pending" status code - Add description for MerchantAdviceCode & ProcessorCVVResponse at ExtraP |
| 2023/05/18 | v13.46 | - Adding ADD_TOKEN, EDIT_TOKEN_DETAILS action type into payment token API - Add new error code (33 , 34) |
| 2023/06/02 | v13.46 | - Add new error code Q00008 for PSQ API |
| 2023/06/13 | v13.46 | - Remove DOKU IB channels |
| 2023/06/26 | v13.46 | - Add ShopeePay for PH |
| 2023/06/28 | v13.47 | - Rectify the key used (verify_key) for Settlement Report API |
| 2023/07/11 | v13.48 | - Add Installment Channel HLB-MPGS, RHB-MPGS |
| 2023/07/13 | v13.49 | - Add new FPX Bank Of China - Change of hash string formula presentation |
| 2023/08/02 | v13.50 | - Update extraP description in Callback URL with IPN |
| 2023/08/04 | v13.51 | - Add DuitNow QR into Static QR Generator |
| 2023/08/09 | v13.52 | - Add LocalCardScheme in extraP - Add installment conditions |
| 2023/08/28 | v13.53 | - Add ShopBack |
| 2023/09/08 | v13.54 | - Rectify the key used (verify_key) for Settlement Refund Report API |
| 2023/09/14 | v13.55 | - Remove hide_billinfo and hide_merchant_header_details in request parameter |
| 2023/10/05 | v13.55 | - Add new error code 21 at reversal API. - Add new 3DS error codes. |
| 2023/10/17 | v13.56 | - Add new parameter "custID" for token payment and token API |
| 2023/11/02 | v13.57 | - Add new parameter "page" for Daily Transaction Report API |
| 2023/11/11 | v13.57 | - Update credit card response code |
| 2023/11/23 | v13.58 | - Add new parameter installment_info in Channel Status API |
| 2023/11/23 | v13.58 | - Add new error code and description for P55 |
| 2023/12/04 | v13.58 | - Add new StatCode 16 for API VoidNonPendingCash API |
| 2024/01/23 | v13.59 | - Adding COINS.PH |
| 2024/01/29 | v13.60 | - Add PaymentExpirationTime |
| 2024/02/22 | v13.61 | - Add new response parameters at Direct Status Requery & Indirect Status Requery API - ProcessorResponseCode - ProcessorCVVResponse - SchemeTransactionID - MerchantAdviceCode - ECI - 3DSVersion - ACSTransactionID - 3DSTransactionID |

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| 2024/02/22 | v13.62 | - Add E2Pay channels and remove DOKU channels |
| 2024/03/26 | v13.63 | - Remove ShopBack Pay Later |
| 2024/04/02 | v13.64 | - WeChatPay CN e-wallet processing & settlement changed from USD to MYR |
| 2024/04/18 | v13.65 | - Remove token parameter and add new parameter token_status |
| 2024/05/13 | v13.66 | - Add metadata in payment request and 3 endpoints response |
| 2024/05/14 | v13.67 | - Adding UPAY Channel - Adding UPAY_UBO Channel - Adding UPAY_PCHC Channel - Adding UPAY_INSTA Channel |
| 2024/05/17 | v13.68 | - Correction of ProcessorCVVResponse , previously wrongly put as ProcessorCCVResponse in status requery and extraP |
| 2024/06/05 | v13.69 | Update 3DS description for error code 5000, 6000 & 7000 |
| 2024/06/07 | v13.70 | Introducing API idempotency |
| 2024/06/14 | v13.71 | Adding PNCO |
| 2024/06/18 | v13.72 | Adding TW ESUN IcpMemberId in payment request and extraP |
| 2024/07/03 | v13.72 | Add new error code E99 |
| 2024/08/14 | v13.73 | Adding type 3 for Foreign Exchange Rate API |
| 2024/08/27 | v13.74 | - Add PayNowSQR in Static QR API |
| 2024/09/26 | v13.75 | - Add ShopBack E-Wallet - Add domain registration for merchant endpoints |
| 2024/10/21 | v13.76 | - Add QRPH channel |
| 2024/10/25 | v13.77 | - Add Grab SG, PH |
| 2024/11/14 | v13.78 | - Add req4terminal parameter in Indirect Status Requery - Add settlement report version 6.0 - Add parameter for to display/hide saved card |
| 2024/12/19 | v13.79 | - Add ShopBack in Jump App Integration |
| 2024/12/24 | v13.80 | - Add new data in extraP for DuitNow QR channel - Add AmBank Visa card installment - Add error description from all card brands |
| 2025/01/07 | v13.81 | - Add new token_status value |
| 2025/01/14 | v13.82 | - Add TransactionGatewayFee and TransactionGatewayCurrency to reconciliation API |
| 2025/01/15 | v13.83 | - Add DuitNow extra info in Indirect Status Requery API |
| 2025/02/05 | v13.84 | - Add Channel extra info in Query by multiple transaction ID (batch output) - Add Channel extra info in Query by order ID (batch output) |

| | | |
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| 2025/03/03 | v13.85 | - Update token data type |
| 2025/03/06 | v13.86 | - Add Fiuu-Cash via Cosway |

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INTRODUCTION

Dealing with banks and multiple payment channels are time-consuming and it might cost you a lot of money. We also understand that it's a hassle for those non-technical people to integrate even one kind of online payment method into their existing website. Thus we consolidate all payment channels into one integration to reduce merchant's costs and effort, and to shorten your time-to-market.

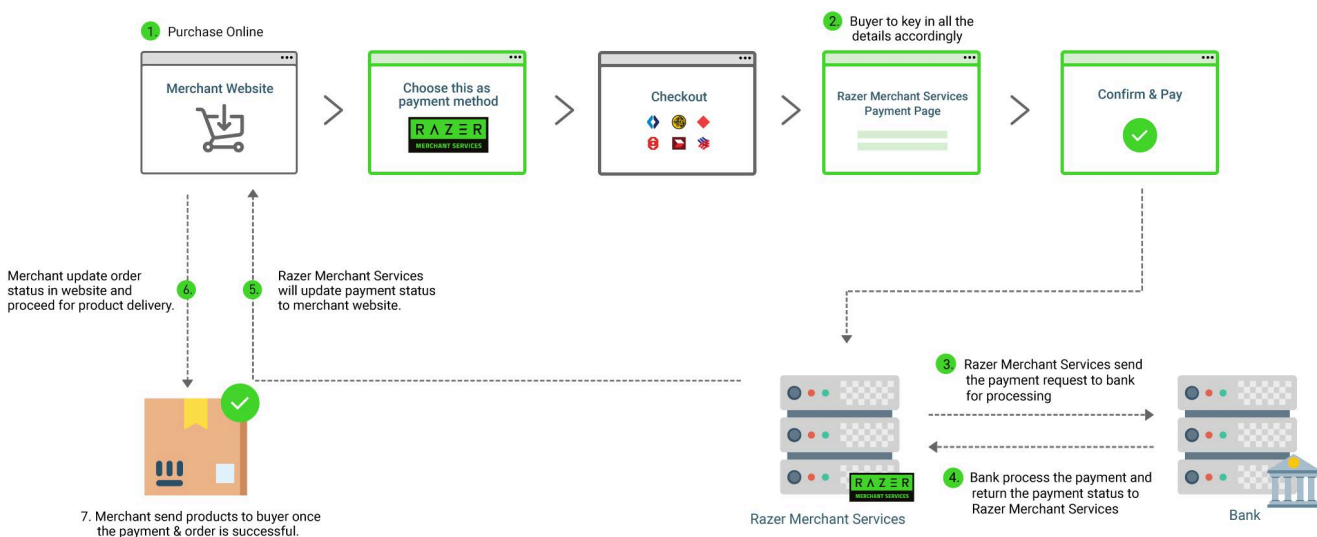
Fiuu, the payment gateway (**PG**), or previously known as **Razer Merchant Services (RMS)**, is to help merchants, who sell online and offline, to reach out to the regional buyers, collecting payment and distributing funds, expanding rapidly to the Southeast Asia market. The service includes:

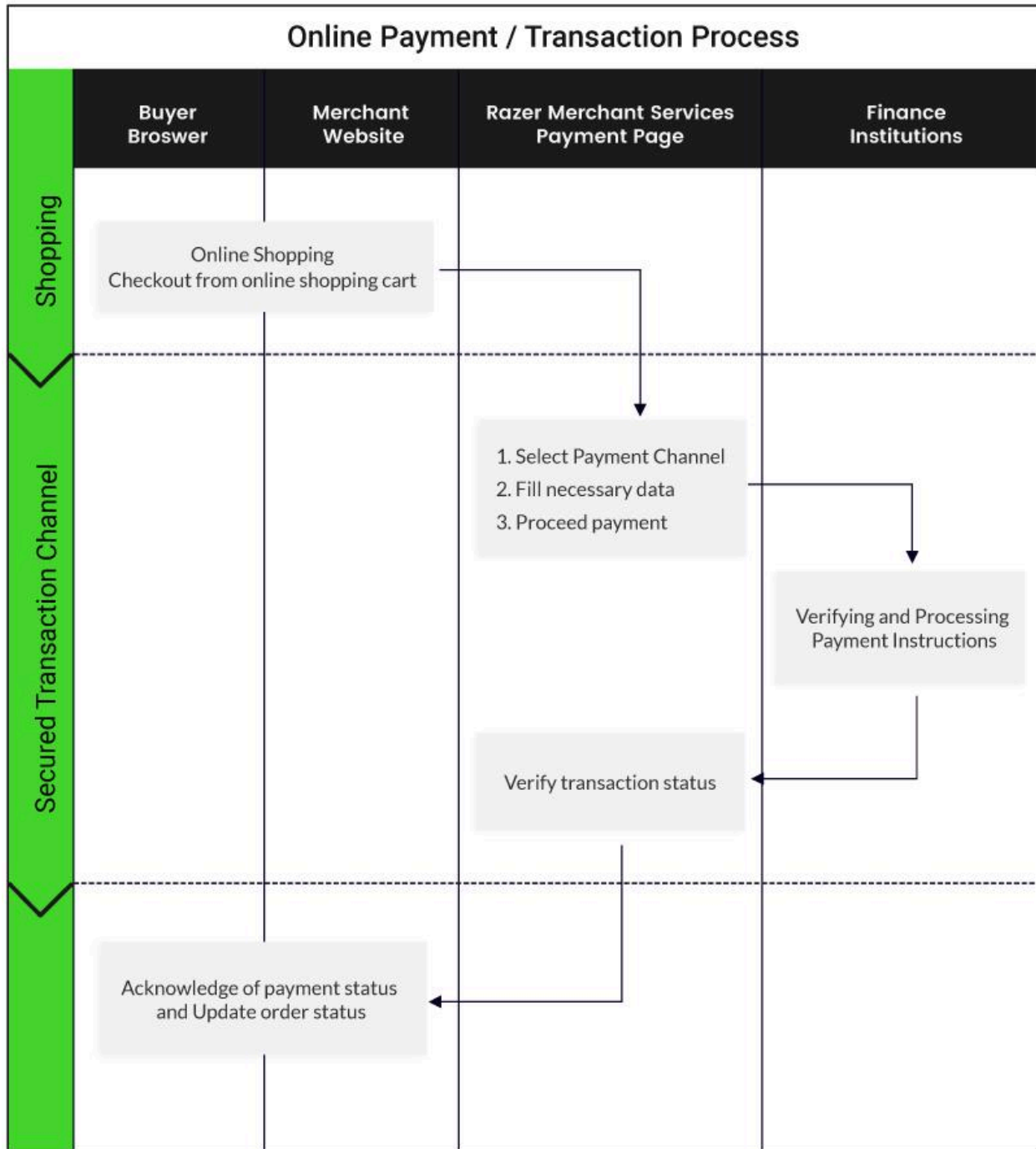
- Front-end
 - RWD or responsive web design payment page for online buyer to checkout
 - Secure 1-click payment using credit card tokenization technology, to ease the payment flow for returning purchase
 - Bcard redemption and rewarding loyalty program for buyers
 - Seamless integration to popup bank login page immediately
 - In-page checkout similar to Stripe and airbnb checkout flow that can seamlessly integrated with merchant system
 - Mobile XDK allows app developers to implement in-app payments
 - Channel switching is available for same currency channels
 - Fiuu Cash which allows over-the-counter (OTC) payment acceptance
 - Common shopping carts payment module, plugin, addon, or extension supported
- Back-end
 - Server-to-server Notification to ensure no missing status update
 - Callback to update merchant system on deferred status change
 - Merchant can login to control panel to track payment status
 - Scheduled report on daily/weekly/monthly basis to update merchant via email
 - Real-time visualized reports

PAYMENT FLOW OVERVIEW

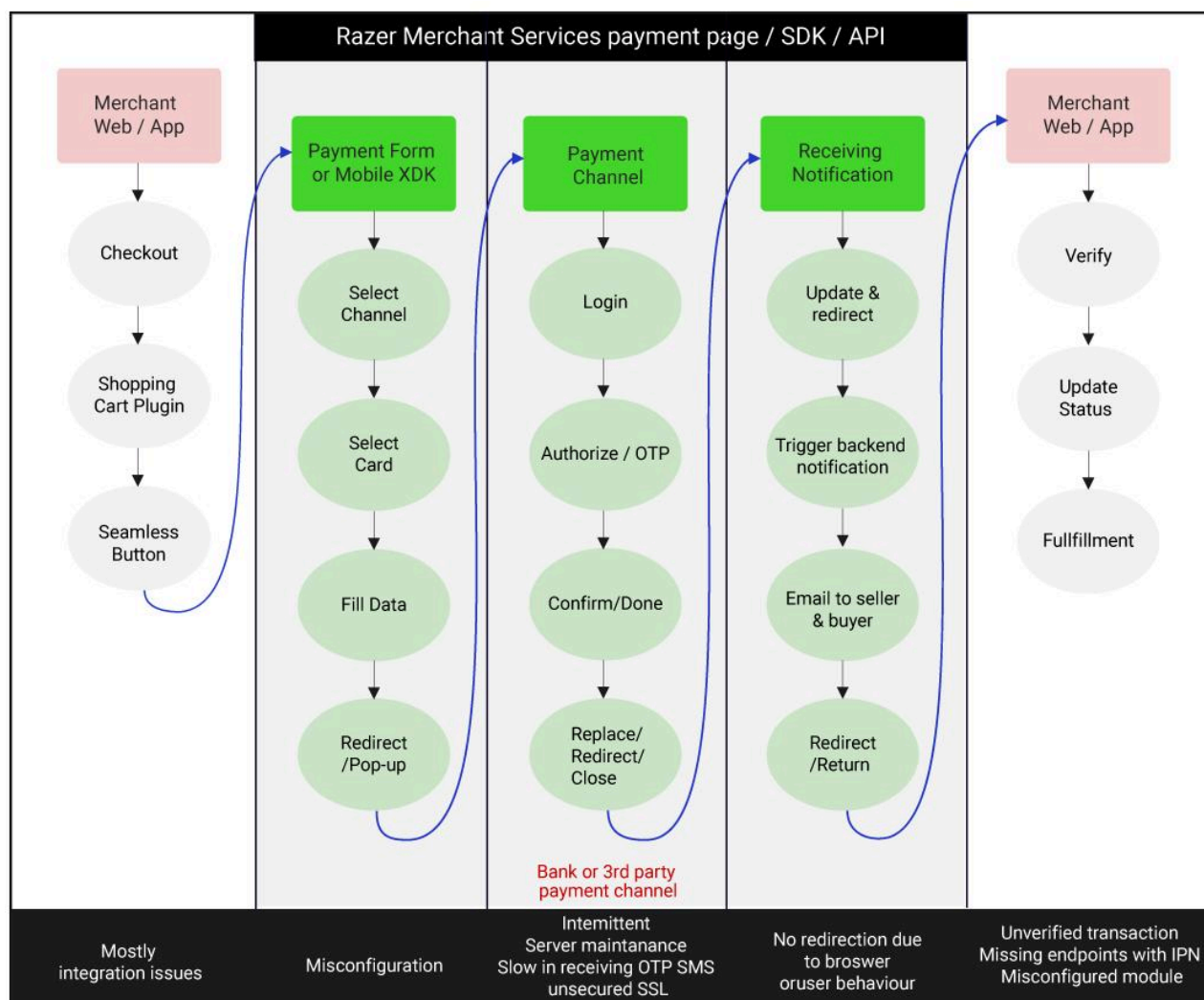
PG provides hosted payment page service, so that merchants do not require costly and tech-savvy PCI-DSS compliance at merchant websites or systems. The integration is as simple as passing parameters via HTTPS **POST** or **GET** method from merchant to PG payment page. Buyer will proceed their transaction on internet banking or any payment channel. Once completed, PG will redirect the buyer's front-end back to the merchant system, using the POST method.

IPN (instant payment notification) or ACK from merchants could be implemented to confirm the receiving of payment status updates.





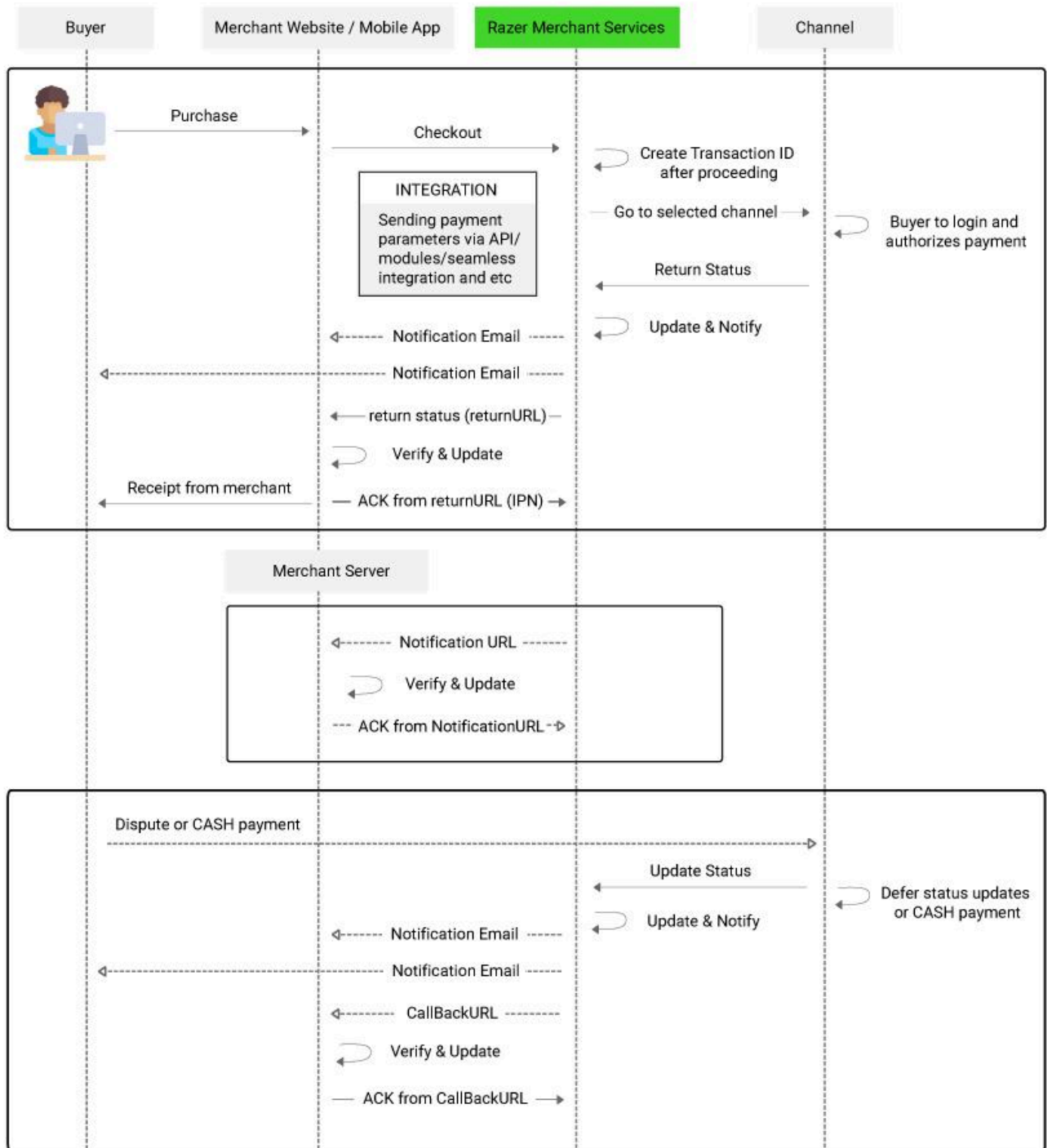
How to identify and report tech-related issues to PG?



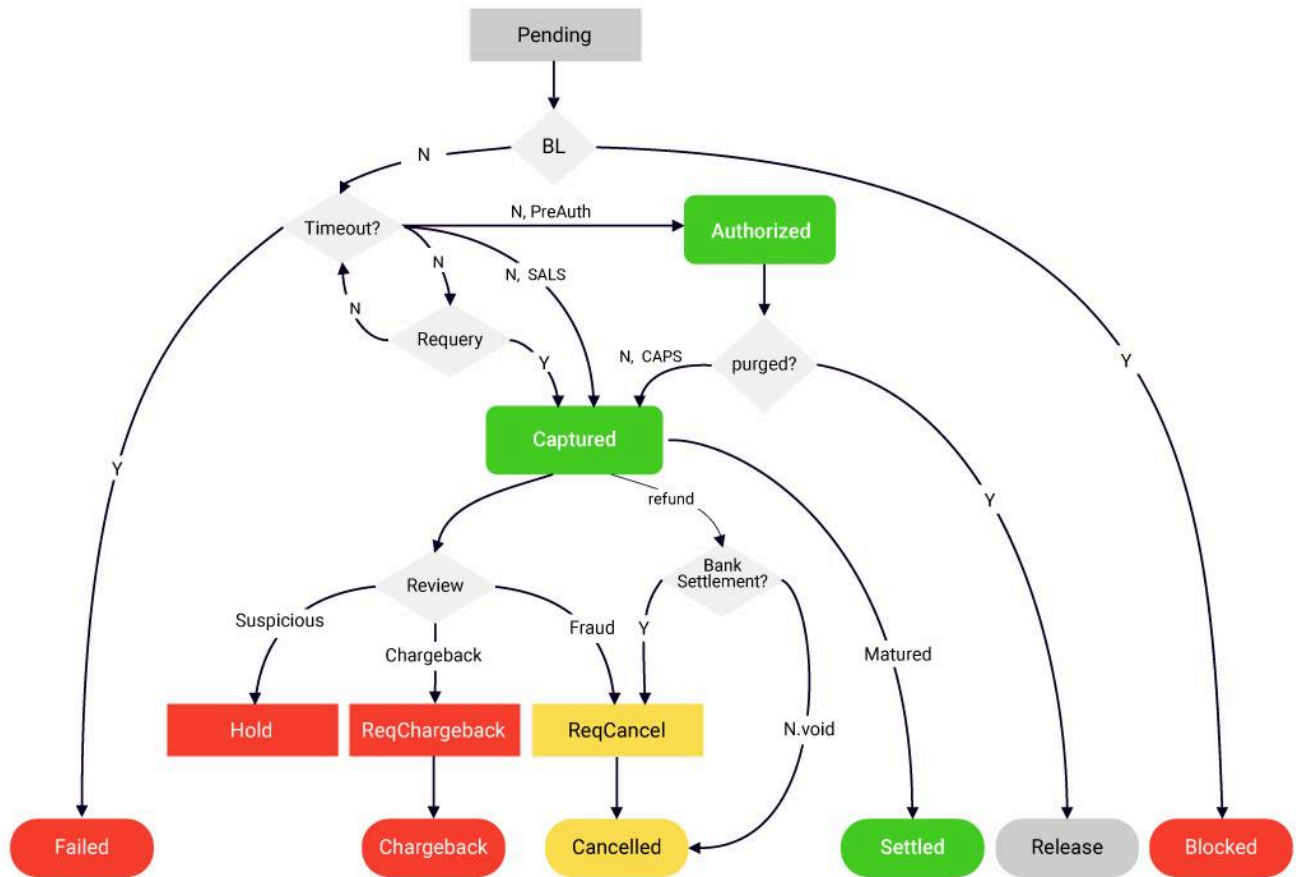
Merchant needs to prepare 3 simple and similar payment endpoint scripts to handle the payment notification from the payment gateway:

1. **Return URL:** front-end or browser redirection notification, which are normally not a 100% reliable and robust channel due to unexpected network connectivity issue or client-side behavior, such as browser application crashes;
2. **Notification URL (webhook):** a server-to-server back-end webhook which is more robust and crucial for payment status or order update;
3. **Callback URL (webhook):** a special handler webhook to get notified on non-realtime payment status, such as “deferred status update”, change of payment status, or Fiuu Cash, which is not a realtime payment naturally.

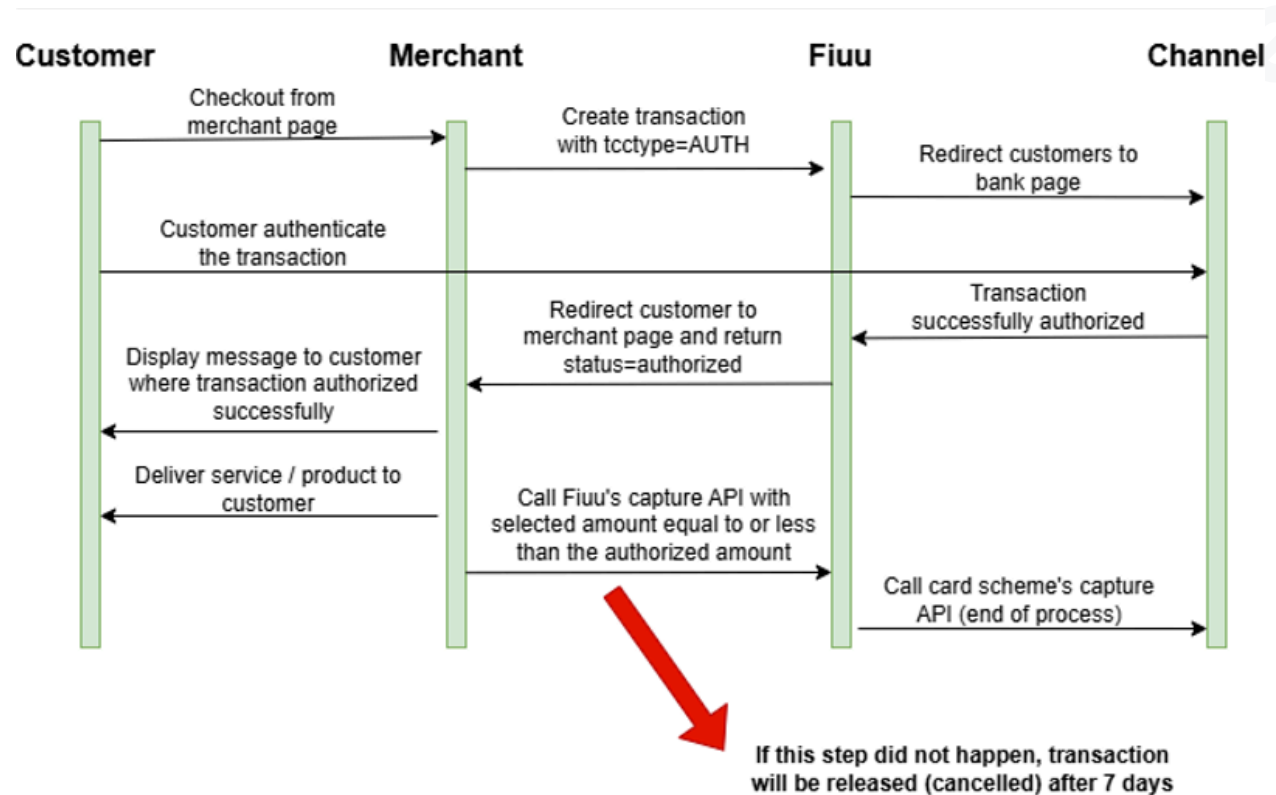
After the normal payment flow, merchants can always send payment status query requests, which is defined in **reQuery** APIs (a.k.a PSQ, Payment Status Query).



Payment Status Flow



Pre authorization workflow is suitable for business without knowing the exact amount to be charged before the service or item is delivered. This feature can be enabled upon request by sending an email to support@fiuu.com. (Refer Capture Request)



SECURITY & DATA INTEGRITY

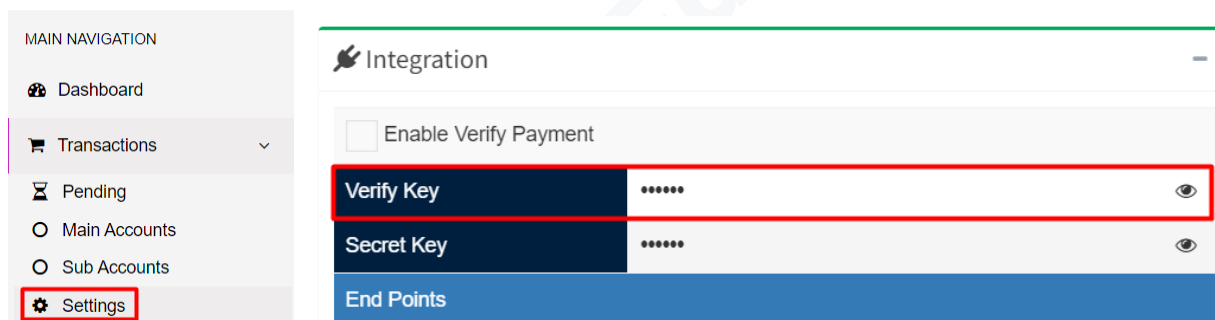
For online payment. The system uses “**merchant ID**”, “**Verify Key**” and “**Secret Key**” to generate encrypted hash string to ensure data integrity in the payment process.

Verify Key [Confidential]

Verify Key is unique shared secret for PG merchants to generate request to the payment gateway. It is a key or seed for generating one-time hash data, which are known as “**vcode**” (merchant’s payment request to the gateway) or some of the “**skey**” (APIs’ request from merchant to the gateway).

How to get the verify key?

1. Logon to PG Merchant Portal
2. Open up the “Transaction” drop down list in “MAIN NAVIGATION”.
3. Click on “Settings” option
4. “Verify Key” will be listed at “Integration” tab
5. Click on Eye Icon to show the “Verify Key”



..... is Merchant’s Verify Key provided by the payment gateway. Please make sure it is at least 32 characters. Merchant may request to change the key when necessary.

Secret Key [Top Secret]

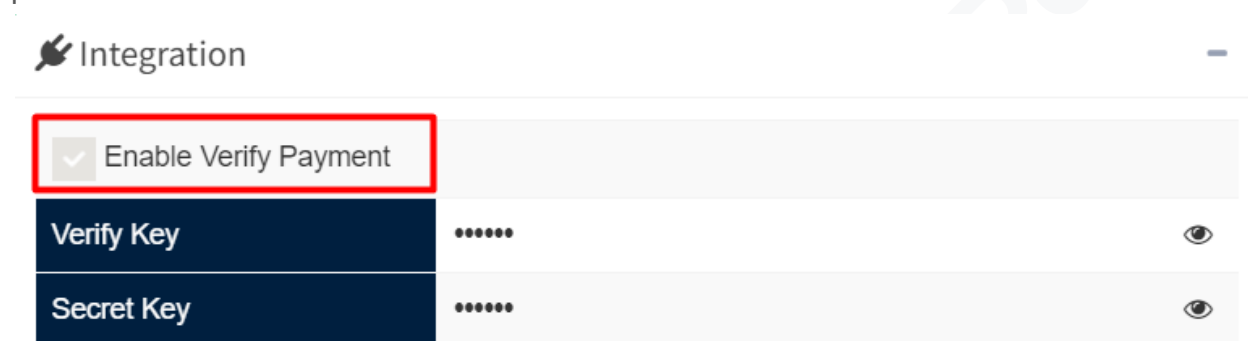
Secret Key is a unique shared secret for the payment gateway to generate responses to merchants. It is a key or seed for generating one-time hash data, which are known as “**skey**” (in the payment response) or some of the “**VrfKey**” (APIs’ response from payment gateway). Merchant or developer **MUST NOT** disclose this secret key to the public. Once the key is suspected to be compromised, please contact PG customer service immediately to reset the key.

Merchants who are using PG mobile xdk **MUST** use different strings for “Verify Key”(treat it as public key) and “Secret Key”(treat it like private key), respectively. Contact PG customer service to reset your keys whenever needed.

vcode (in payment request)

vcode is to ensure the data integrity passed from merchant-end (either website or mobile APP) to the payment page to avoid man-in-the-middle (MITM) attack. It uses “Verify Key”(like a public key) in combination with the data string for hashing purposes.

It becomes mandatory for each transaction if “Enable Verify Payment” is activated in merchant profile as shown:-



The screenshot shows the 'Integration' settings page. A red box highlights the 'Enable Verify Payment' checkbox, which is checked. Below it, the 'Verify Key' and 'Secret Key' fields are shown with masked values (dots) and toggle icons to show or hide the keys.

vcode was encrypted using MD5 encryption hash function and consists of the following information (must be set in the following orders) :

1. Transaction amount
2. Merchant ID
3. Order ID
4. Verify Key

Extra characters/parameters which are **OPTIONAL**

To have these values calculated in the hash. Kindly reach out to our support to help enable it.

5. Currency

Formula to generate **vcode**

$$vcode = md5(\{amount\}\{merchantID\}\{orderId\}\{verify_key\})$$

Example to generate **vcode** for PHP developer

```
<?php
```

```
$amount      = "27.60";  
$merchantID = "ACME";  
$orderid    = "OD8842";
```

```
$verifykey = "xxxxxxxxxxxxxxxxxxxx";  
// Replace xxxxxxxxxxxxxxxxxxxx with your Verify Key  
  
// vcode formula  
$vcode      = md5( $amount.$merchantID.$orderid.$verifykey );  
  
// output of the vcode based on above information equals to :  
$vcode      = "ec7f2c6e85769728a5e9b75893ee6bc1";  
  
?>
```

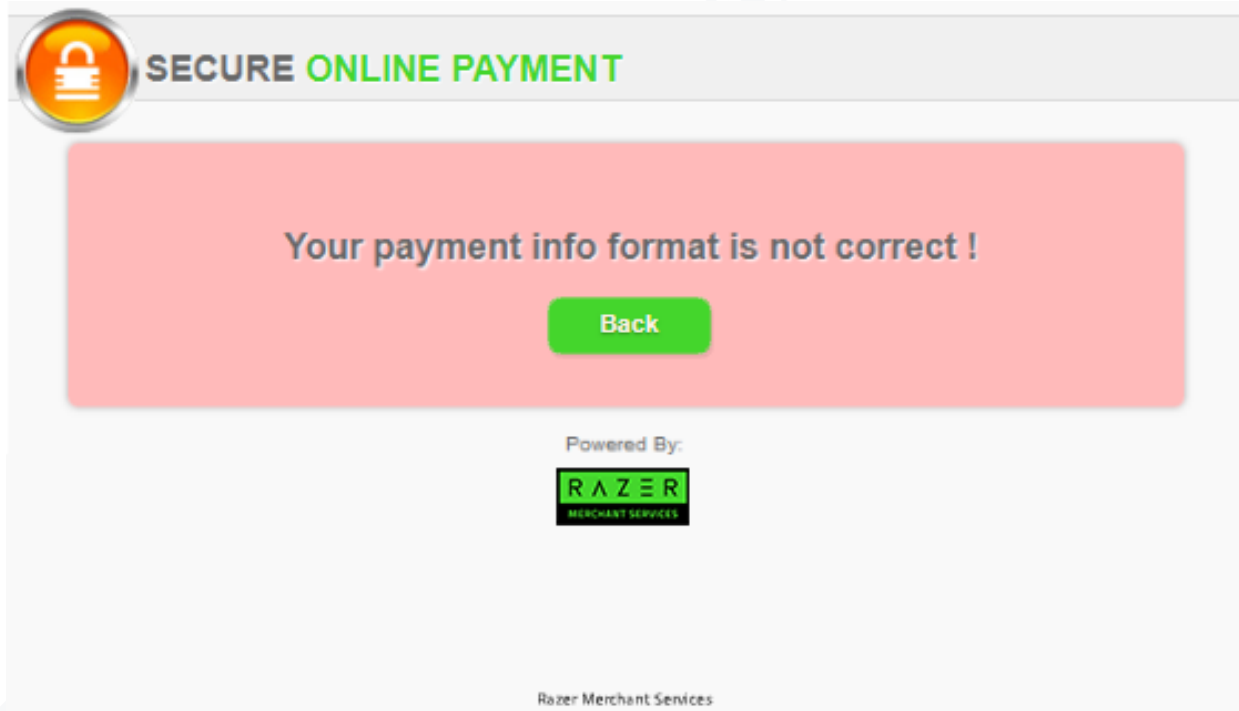
Verification tool for vcode

To verify whether the **vcode** generated is correct, merchant may check on this URL:-

<https://api.fiuu.com/RMS/query/vcode.php>

What happens if a merchant passes in an incorrect **vcode**?

An error will be displayed on the payment page as shown:-



key (in payment response)

skey is a payment gateway generated returning hash string to ensure the payment result data integrity that passed to the merchant system. Merchants or developers **MUST** verify this hash string properly and compare the order ID, currency, amount, and also the payment date/time, to protect self interest from being cheated by a fraudster/hacker. It uses a "Secret Key" (like a private key) in combination with a data string for the hashing process.

Please note that there are other "**skey**" with different formulas in **Merchant Request APIs'** parameters. Try not to confuse yourself with this payment response "**skey**".

skey was encrypted twice using MD5 encryption hash function and consists of the following information (must be set in the following orders) :

First hash string

1. Transaction ID
2. Order ID
3. Status
4. Merchant ID (domain)
5. Amount
6. Currency

Final hash string

1. Payment Date/Time
2. Merchant ID (domain)
3. First hash string
4. Approval Code
5. Secret Key

Formula to generate skey

```
pre_skey = md5( {txnID}{orderId}{status}{merchantID}{amount}{currency} )  
skey = md5( {paydate}{merchantID}{pre_skey}{appcode}{secret_key} )
```

Example to generate skey for PHP developer

```
<?php  
  
$sec_key = "xxxxxxxxxx"; //Replace xxxxxxxxxx with your Secret_Key  
  
/*****  
*Don't change below parameters  
*****/  
$tranID =    $_POST['tranID'];  
$orderid   =    $_POST['orderid'];  
$status    =    $_POST['status'];  
$merchant  =    $_POST['domain'];  
$amount    =    $_POST['amount'];
```

```
$currency      =      $_POST['currency'];
$appcode       =      $_POST['appcode'];
$paydate       =      $_POST['paydate'];
$key           =      $_POST['key']; //Security hashstring returned by PG
```

```
/******
```

```
* To verify the data integrity sending by PG
```

```
*****/
```

```
$key0 = md5( $tranID.$orderid.$status.$merchant.$amount.$currency );
```

```
$key1 = md5( $paydate.$merchant.$key0.$appcode.$sec_key );
```

```
//key1 : Hashstring generated on Merchant system
```

```
// either $merchant or $domain could be one from POST
```

```
// and one that predefined internally
```

```
// by right both values should be identical
```

```
if( $key === $key1 ){
```

```
    // If matched, perform another extra checking before approved order
```

```
} elseif( $key != $key1 ){
```

```
    // If unmatched, reject the order or merchant might send query to
```

```
    // PG using Merchant requery to double check payment status
```

```
    // for that particular order.
```

```
} else {
```

```
    // error or exception case
```

```
}
```

```
?>
```

Domain Registration for Merchant Endpoints

The Return URL, Callback URL, Notify URL and including the Cancel URL are the endpoints that need to be registered. It is important that a merchant register the domain if their endpoints are different from the main website of the business. Failure to do so may result in the merchant not receiving transaction statuses or customers not being redirected to the website when they click the cancel button.

Steps to Register Your Domain:

1. Login to merchant portal

Navigate to <https://portal.fiuu.com>

2. Go to the Domain Registration Page

Navigate to the domain registration page in your merchant dashboard (UI will be provided).

3. Enter Your Domain

Input the domain you wish to use for payment requests. Ensure it is properly formatted and matches the domain you plan to use.

4. Submit for Verification

Once entered, submit the domain for verification by our support team.

5. Verification by Support Team

Our support team will review your domain. If everything is in order, the domain will be approved. If there are any issues, the registration will be rejected, and you will receive feedback on what needs to be corrected.

6. Approval and Use

Once the domain is approved, it will be available for use in payment requests. Ensure that only approved domains are used to avoid any disruptions during transactions.

Advanced Settings

Registered Domain Registered Serial Device/App Name Apple Pay Configuration

Register

| No. | Last Modified | Fully Qualified Domain Name (FQDN) | Is Allow | Action | Apple Pay Verified |
|-----|---------------|------------------------------------|----------|--------|--------------------|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |

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SIMULATION (Sandbox Account)

Merchants should be provided a sandbox account or developer account from PG, in order to simulate the payment flow for successful and failure transaction cases.

Sandbox environment is solely for basic integration and validation purposes, **DO NOT** treat it as a grant for production environment testing and the configuration and implementation might be different. "**Sandbox**" account has a full range of production features for advanced integration and preparing for **UAT** purposes.

USER ACCEPTANCE TEST (Developer Account)

For full feature integration and **UAT**, such as mobile xdk or seamless integration, please request "Developer" account or "Dev" account from PG. These accounts are all set with a short period of lifespan for integration and testing purposes only. No settlement and mass payout is allowed in these accounts.

For real transactions conducted in a "Dev" account, please void or cancel the transaction on the same day. For Malaysian internet banking, only Maybank, CIMB Clicks, and FPX offers refund feature. You may request to turn on the channel if it is not enabled in your "Dev" account.

A "Dev" or developer account is always ended in "**_Dev**" and there will be **no settlement** (hence no payout) for this type of account. Please make sure that your "Dev" account has the same configuration in the production merchant profile to guarantee the expected test results.

PAYMENT APIs

Initiating Payment

Passing parameters to the payment gateway hosted payment page using POST/GET method via HTTPS or SSL connection will initiate a payment request from the merchant system.

REQUEST URL

Production: https://pay.fiuu.com/RMS/pay/{MerchantID}/{Payment_Method}

Sandbox: https://sandbox-payment.fiuu.com/RMS/pay/{MerchantID}/{Payment_Method}

{MerchantID}: mandatory value to identify merchant;

{Payment_Method}: optional value to identify payment channel, only required when channel selection at hosted payment page is disabled upon request by email; Payment channel can be identified by using **channel filename**, or pass the **channel parameter** to **index.php** using GET/POST method.

The URL is an API to accept POST/GET parameters from the merchant site as well as the payment page for buyers. For merchants who use the POST method please include the “ / ” after **{MerchantID}** on the URL.

WARNING: Loading the bank login page or authorization page into iframe is not recommended as most of the banks or channels will block all cross-origin requests and treat it as an XFS, XSS, and CSRF attack.

Channel Lists

Multi-Currency Payment

Default currency: -

| Channel Name | filename | channel | Payable Amount Range | Extra Information |
|-------------------|-------------|----------|----------------------|--|
| Visa / MasterCard | indexT.php | creditT | > 1.00 | 51 currencies supported : AED, AUD , BND , BRL, CAD, CHF, CNY , COP, CZK, DKK, EGP, EUR , FJD, GBP , HKD , HUF, IDR , ILS, INR, IQD, IRR, ISK, JPY , KRW , KWD, LAK, LKR, MOP, MXN, MYR , NGN, NOK, NZD, PHP , PKR, PLN, QAR, RUB, SAR, SCR, SEK, SGD , THB , TRY, TWD , USD , VND , ZAR, BDT, NPR, MMK |
| Visa / MasterCard | indexW.php | creditW | > 1.00 | THB, USD |
| Visa / Mastercard | indexAN.php | creditAN | > 1.00 | MYR, SGD , PHP |
| Unionpay Card | indexAN.php | creditAN | > 1.00 | MYR |
| Visa / Mastercard | indexAI.php | creditAI | > 1.00 | AFN, DZD, ARS, AMD, AWG, AUD, AZN, BSD, BHD, THB, PAB, BBD, BYN, BZD, BMD, VES, BOB, BRL, BND, BGN, BIF, CAD, CVE, KYD, GHS, XOF, XAF, XPF, CLP, COP, KMF, CDF, BAM, NIO, CRC, HRK, CZK, GMD, DKK, MKD, DJF, STD, DOP, VND, XCD, EGP, SVC, ETB, EUR, FKP, FJD, HUF, GIP, HTG, PYG, GNF, GYD, HKD, UAH, ISK, INR, IRR, IQD, JMD, JOD, KES, PGK, LAK, EEK, KWD, MWK, AOA, MMK, GEL, LVL, LBP, ALL, HNL, SLL, LRD, LYD, SZL, LTL, LSL, MGA, MYR, TMT, MUR, MZN, MXN, MDL, MAD, NGN, ERN, NAD, NPR, ANG, ILS, RON, TWD, NZD, BTN, KPW, NOK, PEN, MRO, TOP, PKR, MOP, UYU, PHP, GBP, BWP, QAR, GTQ, ZAR, OMR, KHR, MVR, IDR, RUB, RWF, SHP, SAR, RSD, SCR, SGD, SBD, KGS, SOS, TJS, LKR, SDG, SRD, SEK, CHF, SYP, BDT, WST, TZS, KZT, TTD, MNT, TND, TRY, AED, UGX, CLF, USD, UZS, VUV, KRW, YER, JPY, CNY, ZMW, ZWL, PLN |

Malaysia

Default currency: MYR

| Channel Name | channel/ filename | channel/ parameter | Payable Amount Range / Downtime* | Extra Information |
|--------------------------------|----------------------|-----------------------|-------------------------------------|---------------------------|
| Visa / MasterCard | index.php | credit | > 1.00 | credit/debit/prepaid card |
| Visa / MasterCard | indexAB.php | creditAB | > 1.00 | credit/debit/prepaid card |
| FPX B2C | | | | |
| FPX B2C (all supported banks) | fpx.php | fpx | > 1.00 | indirect internet banking |
| FPX B2C Bank Islam | FPX_BIMB.php | FPX_BIMB | > 1.00 | indirect internet banking |
| FPX B2C Maybank | FPX_MB2U.php | FPX_MB2U | > 1.00 / 12am - 12:15am | indirect internet banking |
| FPX B2C Public Bank | FPX_PBB.php | FPX_PBB | > 1.00 | indirect internet banking |
| FPX B2C CIMBClicks | FPX_CIMBCLICKS.php | FPX_CIMBCLICKS | > 1.00 | indirect internet banking |
| FPX B2C AmOnline | FPX_AMB.php | FPX_AMB | > 1.00 | indirect internet banking |
| FPX B2C Hong Leong | FPX_HLB.php | FPX_HLB | > 1.00 | indirect internet banking |
| FPX B2C RHB Bank | FPX_RHB.php | FPX_RHB | > 1.00 / 12am - 12:10am | indirect internet banking |
| FPX B2C OCBC | FPX_OCBC.php | FPX_OCBC | > 1.00 | indirect internet banking |
| FPX B2C Standard Chartered | FPX_SCB.php | FPX_SCB | > 1.00 | indirect internet banking |
| FPX B2C Affin Bank | FPX_ABB.php | FPX_ABB | > 1.00 | indirect internet banking |
| FPX B2C Bank Rakyat | FPX_BKRM.php | FPX_BKRM | > 1.00 / 12am - 12:30am | indirect internet banking |
| FPX B2C Bank Muamalat | FPX_BMMB.php | FPX_BMMB | > 1.00 | indirect internet banking |
| FPX B2C Kuwait Finance House | FPX_KFH.php | FPX_KFH | > 1.00 | indirect internet banking |
| FPX B2C Bank Simpanan Nasional | FPX_BSN.php | FPX_BSN | > 1.00 / 12am - 12:15am | indirect internet banking |
| FPX B2C Alliance Bank | FPX_ABMB.php | FPX_ABMB | > 1.00 | indirect internet banking |
| FPX B2C United Overseas Bank | FPX_UOB.php | FPX_UOB | > 1.00 | indirect internet banking |
| FPX B2C HSBC Bank | FPX_HSBC.php | FPX_HSBC | > 1.00 | indirect internet banking |
| FPX B2C Agrobank | FPX_AGROBANK.php | FPX_AGROBANK | > 1.00 | Indirect internet banking |
| FPX B2C Bank Of China | FPX_BOCM.php | FPX_BOCM | > 1.00 | Indirect internet banking |

| DUITNOW OBW | | | | |
|--------------------------------------|------------------------|--------------------|--------|---------------------------|
| DuitNow OBW - Affin Bank | RPP_RTP_ABB.php | RPP_RTP_ABB | > 1.00 | Indirect internet banking |
| DuitNow OBW - Alliance Bank | RPP_RTP_ABMB.php | RPP_RTP_ABMB | > 1.00 | Indirect internet banking |
| DuitNow OBW - Agrobank | RPP_RTP_AGROBANK.php | RPP_RTP_AGROBANK | > 1.00 | Indirect internet banking |
| DuitNow OBW - AmBank | RPP_RTP_AMB.php | RPP_RTP_AMB | > 1.00 | Indirect internet banking |
| DuitNow OBW - CIMB Bank | RPP_RTP_CIMBCLICKS.php | RPP_RTP_CIMBCLICKS | > 1.00 | Indirect internet banking |
| DuitNow OBW - Bank Islam | RPP_RTP_BIMB.php | RPP_RTP_BIMB | > 1.00 | Indirect internet banking |
| DuitNow OBW - Bank Rakyat | RPP_RTP_BKRM.php | RPP_RTP_BKRM | > 1.00 | Indirect internet banking |
| DuitNow OBW - Bank Muamalat | RPP_RTP_BMMB.php | RPP_RTP_BMMB | > 1.00 | Indirect internet banking |
| DuitNow OBW - Bank Simpanan Nasional | RPP_RTP_BSN.php | RPP_RTP_BSN | > 1.00 | Indirect internet banking |
| DuitNow OBW - Hong Leong | RPP_RTP_HLB.php | RPP_RTP_HLB | > 1.00 | Indirect internet banking |
| DuitNow OBW - HSBC Bank | RPP_RTP_HSBC.php | RPP_RTP_HSBC | > 1.00 | Indirect internet banking |
| DuitNow OBW - Kuwait Finance House | RPP_RTP_KFH.php | RPP_RTP_KFH | > 1.00 | Indirect internet banking |
| DuitNow OBW - Maybank | RPP_RTP_MB2U.php | RPP_RTP_MB2U | > 1.00 | Indirect internet banking |
| DuitNow OBW - OCBC | RPP_RTP_OCBC.php | RPP_RTP_OCBC | > 1.00 | Indirect internet banking |
| DuitNow OBW - Public Bank | RPP_RTP_PBB.php | RPP_RTP_PBB | > 1.00 | Indirect internet banking |
| DuitNow OBW - RHB Bank | RPP_RTP_RHB.php | RPP_RTP_RHB | > 1.00 | Indirect internet banking |
| DuitNow OBW - Standard Chartered | RPP_RTP_SCB.php | RPP_RTP_SCB | > 1.00 | Indirect internet banking |
| DuitNow OBW - United Overseas Bank | RPP_RTP_UOB.php | RPP_RTP_UOB | > 1.00 | Indirect internet banking |
| DuitNow OBW - Bank Of China | RPP_RTP_BOCM.php | RPP_RTP_BOCM | > 1.00 | Indirect internet banking |
| PayNet Checkout | | | | |

| | | | | |
|--|---------------------|-----------------|--------|---------------------------|
| PayNet Checkout - Affin Bank | PNCO_ABB.php | PNCO_ABB | > 1.00 | Indirect internet banking |
| PayNet Checkout - Alliance Bank | PNCO_ABMB.php | PNCO_ABMB | > 1.00 | Indirect internet banking |
| PayNet Checkout - Agrobank | PNCO_AGROBANK.php | PNCO_AGROBANK | > 1.00 | Indirect internet banking |
| PayNet Checkout - AmBank | PNCO_AMB.php | PNCO_AMB | > 1.00 | Indirect internet banking |
| PayNet Checkout - CIMB Bank | PNCO_CIMBCLICKS.php | PNCO_CIMBCLICKS | > 1.00 | Indirect internet banking |
| PayNet Checkout - Bank Islam | PNCO_BIMB.php | PNCO_BIMB | > 1.00 | Indirect internet banking |
| PayNet Checkout - Bank Rakyat | PNCO_BKRM.php | PNCO_BKRM | > 1.00 | Indirect internet banking |
| PayNet Checkout - Bank Muamalat | PNCO_BMMB.php | PNCO_BMMB | > 1.00 | Indirect internet banking |
| PayNet Checkout - Bank Simpanan Nasional | PNCO_BSN.php | PNCO_BSN | > 1.00 | Indirect internet banking |
| PayNet Checkout - Hong Leong | PNCO_HLB.php | PNCO_HLB | > 1.00 | Indirect internet banking |
| PayNet Checkout - HSBC Bank | PNCO_HSBC.php | PNCO_HSBC | > 1.00 | Indirect internet banking |
| PayNet Checkout - Kuwait Finance House | PNCO_KFH.php | PNCO_KFH | > 1.00 | Indirect internet banking |
| PayNet Checkout - Maybank | PNCO_MB2U.php | PNCO_MB2U | > 1.00 | Indirect internet banking |
| PayNet Checkout - OCBC | PNCO_OCBC.php | PNCO_OCBC | > 1.00 | Indirect internet banking |
| PayNet Checkout - Public Bank | PNCO_PBB.php | PNCO_PBB | > 1.00 | Indirect internet banking |
| PayNet Checkout - RHB Bank | PNCO_RHB.php | PNCO_RHB | > 1.00 | Indirect internet banking |
| PayNet Checkout - Standard Chartered | PNCO_SCB.php | PNCO_SCB | > 1.00 | Indirect internet banking |
| PayNet Checkout - United Overseas Bank | PNCO_UOB.php | PNCO_UOB | > 1.00 | Indirect internet banking |
| PayNet Checkout - Bank Of China | PNCO_BOCM.php | PNCO_BOCM | > 1.00 | Indirect internet banking |
| PayNet Checkout - MBSB Bank | PNCO_MBSB.php | PNCO_MBSB | > 1.00 | Indirect internet banking |
| FPX B2B | | | | |

| | | | | |
|--------------------------------|-------------------------|------------------|---|---------------------------|
| FPX B2B AmBank | FPX_B2B_AMB.php | FPX_B2B_AMB | 2.00 - 1mil / 12am - 2am | indirect internet banking |
| FPX B2B Hong Leong | FPX_B2B_HLB.php | FPX_B2B_HLB | 2.00 - 1mil | indirect internet banking |
| FPX B2B United Overseas Bank | FPX_B2B_UOB.php | FPX_B2B_UOB | 2.00 - 1mil | indirect internet banking |
| FPX B2B Affin Bank | FPX_B2B_ABB.php .php | FPX_B2B_ABB | 2.00 - 1mil | indirect internet banking |
| FPX B2B CIMB Bank | FPX_B2B_CIMB.php | FPX_B2B_CIMB | 2.00 - 1mil | indirect internet banking |
| FPX B2B Bank Islam | FPX_B2B_BIMB.php | FPX_B2B_BIMB | 2.00 - 1mil / 11pm - 7am | indirect internet banking |
| FPX B2B Public Bank | FPX_B2B_PBB.php | FPX_B2B_PBB | 2.00 - 1mil | indirect internet banking |
| FPX B2B RHB Bank | FPX_B2B_RHB.php | FPX_B2B_RHB | 2.00 - 1mil / 12am - 12:15am | indirect internet banking |
| FPX B2B HSBC | FPX_B2B_HSBC.php | FPX_B2B_HSBC | 2.00 - 1mil | indirect internet banking |
| FPX B2B Maybank2E | FPX_M2E.php | FPX_M2E | 2.00 - 1mil / 12am - 1 am | indirect internet banking |
| FPX B2B BNP Paribas | FPX_B2B_BNP.php | FPX_B2B_BNP | 2.00 - 1mil / 5pm - 8.45am | indirect internet banking |
| FPX B2B Affin Max | FPX_B2B_ABBM.php | FPX_B2B_ABBM | 2.00 - 1mil | indirect internet banking |
| FPX B2B Citibank | FPX_B2B_CITIBANK.php | FPX_B2B_CITIBANK | 2.00 - 1mil | indirect internet banking |
| FPX B2B i-bizRAKYAT | FPX_B2B_BKRM.php | FPX_B2B_BKRM | 2.00 - 1mil | indirect internet banking |
| FPX B2B Public Bank Enterprise | FPX_B2B_PBBE.php | FPX_B2B_PBBE | 2.00 - 1mil | indirect internet banking |
| FPX B2B UOB Regional | FPX_B2B_UOBR.php | FPX_B2B_UOBR | 2.00 - 1mil | indirect internet banking |
| FPX B2B Agrobank | FPX_B2B_AGROBANK.php | FPX_B2B_AGROBANK | 2.00- 1mil | Indirect internet banking |
| FPX B2C DirectDebit e-Mandate | FPX_EMANDATE.php | FPX_EMANDATE | > 1.00 Maximum authorized installment amount but always debit MYR 1.00 upon enrollment and this will be fully refunded | direct debit enrollment |
| FPX DirectDebit e-Mandate | FPX_EMANDATE_ABB.php | FPX_EMANDATE_ABB | > 1.00 Maximum authorized installment amount but always debit MYR 1.00 upon enrollment and this will be fully refunded | direct debit enrollment |

| DuitNow | | | | |
|----------------------------|-------------------------|-----------------|--|--|
| DuitNow QR | RPP_DuitNowQR.php | RPP_DuitNowQR | > 1.00 | DuitNow QR payment |
| Wallet | | | | |
| Razer Pay | RazerPay.php | RazerPay | > 1.00 | e-wallet |
| Razer Gold | MOLPoints.php | MOLPoints | > 1.00 | e-wallet |
| Touch N' Go E-WALLET | TNG-EWALLET.php | TNG-EWALLET | > 1.00 | e-wallet |
| BOOST | BOOST.php | BOOST | > 1.00 | e-wallet |
| GrabPay | GrabPay.php | GrabPay | > 1.00 | e-wallet |
| Maybank QRPay | MB2U_QRPay-Push.php | MB2U_QRPay-Push | > 1.00 | e-wallet |
| ShopeePay | ShopeePay.php | ShopeePay | > 1.00 | e-wallet |
| ShopBack | ShopBack.php | ShopBack | > 1.00 | e-wallet |
| OTC | | | | |
| Fiuu Cash via 7E | cash.php | cash | > 1.00 | OTC @ 7-Eleven |
| JomPay ATM 9282 | jompay.php | jompay | > 1.00 | ATM bill payment |
| CIMB Virtual Account | CIMB-VA.php | CIMB-VA | > 1.00 | CIMB Clicks / ATM transfer for CIMB customers only |
| Fiuu Cash via 99 | cash99.php | cash99 | > 1.00 | OTC @ 99 Speedmart |
| Fiuu Cash via KK | cashkkmart.php | cashkkmart | > 1.00 | OTC @ KK Mart |
| Fiuu Cash via Cosway | cashcosway.php | cashcosway | > 1.00 | OTC @ Cosway |
| Installment for card | | | | |
| MBB-eBPG-(PD or PW) EzyPay | MBB-EzyPay.php | MBB-EzyPay | Non-installment > 1.00 Installment: 3 mon: 200 - 1000 6 mon: 500 - 15,000 12 mon: 500 - 15,000 24 mon: 2,500 - 15,000 | MBB card installment V/M card payment |
| PBB-ZIIP | installmentPBB-ZIIP.php | PBB-ZIIP | non-installment > 1.00 installment > 500.00 | PBB card installment V/M card payment |
| PBB-CYBS | indexAC.php | creditAC | > 1.00 | PBB card installment V/M card payment |
| CIMB-eBPG | indexL.php | creditL | non-installment > 1.00 Installment: 6 mon: >= 1,000 | CIMB card installment V/M card payment |

| | | | | |
|--------------------|--------------------|----------------|--|--|
| | | | 12 mon: >= 1,200 | |
| AMBANK-eBPG-PD | indexU.php | creditU | non-installment > 1.00 Installment: 3 mon: >= 500 6 mon: >= 1,000 12 mon: >= 1,200 18 mon: >= 1,500 24 mon: >= 1,500 36 mon: >= 2,000 | AMB card installment V/M card payment |
| AMBANK-eBPG-PW | AMBANK-eBPG-PW.php | AMBANK-eBPG-PW | non-installment > 1.00 installment > 500.00 | AMB card installment V/M card payment |
| AMBANK (Visa only) | indexBI.php | creditBI | Installment: 3 mon: >= 500 6 mon: >= 1,000 12 mon: >= 1,200 18 mon: >= 1,500 24 mon: >= 1,500 36 mon: >= 2,000 | AMB card installment For Visa card payment only |
| HSBC-MIGS-PW | HSBC-MIGS-PW.php | HSBC-MIGS-PW | > 1.00 | HSBC card installment V/M card payment |
| SCB-MGIS-PW | SCB-MGIS-PW.php | SCB-MGIS-PW | > 1.00 | SCB card installment V/M card payment |
| HLB-MPGS | indexAE.php | creditAE | Installment: 3 mon: >= 500 6 mon: >= 1,000 12 mon: >= 1,200 | HLB card installment V/M card payment |
| RHB-MPGS | indexAH.php | creditAH | Installment: 3 mon: >= 500 6 mon: >= 1,000 12 mon: >= 1,200 18 mon: >= 1,500 24 mon: >= 1,500 36 mon: >= 2,000 | RHB card installment V/M card payment |
| CYBERSOURCE | indexAB.php | creditAB | Installment: 3 mon: >= 500 6 mon: >= 1,000 12 mon: >= 1,200 24 mon: >= 1,500 | Affin card installment V/M card payment |
| HSBC | indexBC.php | creditBC | Installment: 3 mon: >= 300 6 mon: >= 500 12 mon: >= 500 24 mon: >= 500 | HSBC card installment V/M card payment |
| SCB | indexBF.php | creditBF | Installment: 3 mon: >= 1,000 6 mon: >= 1,000 12 mon: >= 1,000 24 mon: >= 1,000 | SCB card installment V/M card payment |

* Downtime is for reference only

Remarks

1. Secure 1-click or credit card tokenization function can be enabled in the merchant profile to ease next purchase on the same merchant system.
2. Bcard loyalty reward points for successful transactions can be activated in the merchant profile. (Obsoleted)
3. For certain Razer Cash channels, such as 7-eleven and epay, round to the nearest 0 or 5 cents and convenience store fee applied. Buyer will see the "Payable Amount", but PG still returns the amount passed from the merchant system.

Singapore

Default currency: SGD

| Channel Name | filename | channel | Payable Amount Range | Extra Information |
|-----------------|----------------|------------|----------------------|---------------------------|
| eNETS Debit | enetsD.php | enetsD | > 5.00 | indirect internet banking |
| SAM by SingPost | singpost.php | singpost | > 5.00 | bank card / ATM |
| AXS | AXS.php | AXS | > 5.00 | bank card / ATM |
| Wallet | | | | |
| Razer Pay | RazerPay.php | RazerPay | > 1.00 | e-wallet |
| PayNow | PayNow.php | PayNow | >1.00 | Online banking/e-wallet |
| GrabPay (SGD) | GrabPay_SG.php | GrabPay_SG | >1.00 | e-Wallet |

Default currency: SGD, MYR, USD

| Channel Name | filename | channel | Payable Amount Range | Extra Information |
|----------------|--------------------|----------------|-----------------------|-------------------|
| Wallet | | | | |
| Crypto tripleA | Crypto_tripleA.php | Crypto_tripleA | No min and max amount | Crypto e-wallet |

Default currency: SGD, MYR, PHP, THB

| Channel Name | filename | channel | Payable Amount Range | Extra Information |
|-------------------|-----------|---------|----------------------|-------------------|
| Buy Now Pay Later | | | | |
| Atome | Atome.php | Atome | >10.00 | V/M card payment |

Philippines

Default currency: PHP

| Channel Name | filename | channel | Payable Amount Range | Extra Information |
|--------------------------------------|----------------------|-------------------|----------------------|----------------------------------|
| Dragonpay | dragonpay.php | dragonpay | > 50.00 | indirect internet banking / cash |
| Razer Cash PH | cashph.php | cashph | > 100 | OTC @ Razer Cash PH |
| GCash | GCash.php | GCash | <100,000 | e-Wallet |
| Alipay+ GCash | AlipayPlus_GCash.php | AlipayPlus_G CASH | > 1.00 | e-Wallet (MYR only) |
| Bank of the Philippine Islands (BPI) | BPI.php | BPI | > 1.00 | Internet Banking |
| UPAY | UPAY.php | UPAY | > 1.00 | Internet Banking |
| UnionBank Online (UPay) | UPAY_UBO.php | UPAY_UBO | > 1.00 | Internet Banking |
| PesoNet (UPay) | UPAY_PCHC.php | UPAY_PCHC | > 1.00 | Internet Banking |
| Instapay (UPay) | UPAY_INSTA.php | UPAY_INSTA | > 1.00 | Internet Banking |
| PayMaya | PayMaya.php | PayMaya | > 1.00 | Credit card |
| COINS.PH | COINS_PH.php | COINS_PH | >1.00 | e-Wallet |
| Wallet | | | | |
| PayMaya e-wallet | PayMaya-eWallet.php | PayMaya-eWallet | > 1.00 | e-Wallet |
| ShopeePay | ShopeePay.php | ShopeePay | > 1.00 | e-Wallet |
| GrabPay | GrabPay.php | GrabPay | > 1.00 | e-Wallet |
| GrabPay (PHP) | GrabPay_PH.php | GrabPay_PH | >1.00 | e-Wallet |
| QRPH | | | | |
| QRPH | QRPH.php | QRPH.php | > 1.00 | QRPH |

Indonesia

Default currency: IDR

| Channel Name | filename | channel | Payable Amount Range | Extra Information |
|---|-----------------------------|-------------------------|----------------------|-------------------------------|
| Alipay+ DANA | AlipayPlus_DANA.php | AlipayPlus_DANA | >1.00 | e-Wallet (MYR only) |
| e2Pay BNI Virtual Account (VA) | e2Pay_BNI_VA.php | e2Pay_BNI_VA | > 10,000.00 | OTC |
| e2Pay CIMB Virtual Account (VA) | e2Pay_CIMB_VA.php | e2Pay_CIMB_VA | > 10,000.00 | OTC |
| e2Pay Mandiri Virtual Account (VA) | e2Pay_MANDIRI_VA.php | e2Pay_MANDIRI_VA | > 10,000.00 | OTC |
| e2Pay Permata Virtual Account (VA) | e2Pay_PERMATA_VA.php | e2Pay_PERMATA_VA | > 10,000.00 | OTC |
| e2Pay BNI Virtual Account (VA) | e2Pay_BNI_VA.php | e2Pay_BNI_VA | > 10,000.00 | OTC |
| e2Pay BCA Virtual Account (VA) | e2Pay_BCA_VA.php | e2Pay_BCA_VA | > 10,000.00 | OTC |
| e2Pay CIMB Octo Clicks Internet Banking | e2Pay_CIMBOctoClicks_IB.php | e2Pay_CIMBOctoClicks_IB | > 10,000.00 | Online Banking |
| e2Pay CIMB QRIS | e2Pay_CIMB_QRIS.php | e2Pay_CIMB_QRIS | > 10,000.00 | e-Wallet |
| e2Pay CIMB OctoPay | e2Pay_CIMB_OctoPay.php | e2Pay_CIMB_OctoPay | > 10,000.00 | e-Wallet |
| e2Pay DANA | e2Pay_DANA.php | e2Pay_DANA | > 100.00 | e-Wallet |
| e2Pay LinkAja Applink | e2Pay_LINKAJA.php | e2Pay_LINKAJA_APPLINK | > 100.00 | e-Wallet |
| e2Pay LinkAja QRIS | e2Pay_LINKAJA.php | e2Pay_LINKAJA_QRIS | > 100.00 | e-Wallet |
| e2Pay LinkAja Web Checkout | e2Pay_LINKAJA.php | e2Pay_LINKAJA_WCO | > 100.00 | e-Wallet |
| e2Pay OVO | e2Pay_OVO.php | e2Pay_OVO | > 100.00 | e-Wallet |
| e2Pay ShopeePay JumpApp | e2Pay_SHOPEEPAY_JUMPAPP.php | e2Pay_SHOPEEPAY_JUMPA | > 100.00 | e-Wallet |
| e2Pay ShopeePay QRIS | e2Pay_SHOPEEPAY_QRIS.php | e2Pay_SHOPEEPAY_QRIS | > 100.00 | e-Wallet |
| e2Pay GOPAY | e2Pay_GOPAY.php | e2Pay_GOPAY | > 10000.00 | e-Wallet |
| e2Pay Kredivo Financing | e2Pay_Kredivo_FN.php | e2Pay_Kredivo_FN | - | Financing (Buy Now Pay Later) |

| | | | | |
|-------------------|-----------------------|-------------------|------------|-------------------------------|
| e2Pay MBayar QR | e2Pay_MBayar_QR.php | e2Pay_MBayar_QR | > 10000.00 | e-Wallet |
| e2Pay Indomaret | e2Pay_Indomaret.php | e2Pay_Indomaret | > 10000.00 | OTC |
| e2Pay Alfamart | e2Pay_Alfamart.php | e2Pay_Alfamart | > 10000.00 | OTC |
| e2Pay Indodana | e2Pay_Indodana_FN.php | e2Pay_Indodana_FN | - | Financing (Buy Now Pay Later) |
| e2Pay DBankPro IB | e2Pay_DBankPro_IB.php | e2Pay_DBankPro_IB | > 10000.00 | Online Banking |

Thailand

Default currency: THB

| Channel Name | filename | channel | Payable Amount Range | Extra Information |
|----------------------------|------------------------|--------------------|----------------------|---|
| Bank of Ayudhya (Krungsri) | BAY_IB_U.php | BAY_IB_U | > 1.00 | direct internet banking (fees on buyer) |
| Bangkok Bank | BBL_IB_U.php | BBL_IB_U | > 1.00 | direct internet banking (fees on buyer) |
| Krung Thai Bank | KTB_IB_U.php | KTB_IB_U | > 1.00 | direct internet banking (fees on buyer) |
| Tesco Lotus & Big Central | Cash-TH.php | Cash-TH | > 1.00 | OTC |
| Kasikornbank PAYPLUS | KBANK_PayPlus.php | KBANK_PayPlus | > 1.00 | direct internet banking (fees on buyer) |
| Siam Commercial Bank | SCB_IB_U.php | SCB_IB_U | > 1.00 | direct internet banking (fees on buyer) |
| Prompt Pay Request to Pay | KBANK_RTP.php | KBANK_RTP | > 1.00 | Request to pay |
| Wallet | | | | |
| Kbank Promptpay QR | KBANK_THQR_Payment.php | KBANK_THQR_Payment | > 1.00 | Direct internet banking & e-wallet |
| LinePay | LinePay.php | LINEPAY | > 0.01 | eWallet |

Vietnam

Default currency: VND

| Channel Name | filename | channel | Payable Amount Range | Extra Information |
|------------------------|-----------------------|-------------------|----------------------|-------------------|
| Bank Transfer via 9Pay | 9PAY_BANKTRANSFER.php | 9PAY_BANKTRANSFER | > 10,000.00 | Online Banking |
| Debit Card via 9Pay | 9PAY_DEBITCARD.php | 9PAY_DEBITCARD | > 2,000.00 | bank card / ATM |
| Wallet | | | | |
| NganLuong | nganluong.php | nganluong | > 2,000.00 | e-wallet |
| VTC Pay | vtcpay.php | vtcpay | > 1,000.00 | e-wallet |
| 9Pay e-wallet | 9PAY_EWALLET.php | 9PAY_EWALLET | > 4,000.00 | e-wallet |

China

Default currency: USD/MYR/SGD (for merchant), RMB/CNY/MYR/SGD/USD (for buyer)

| Channel Name | filename | channel | Payable Amount Range (Processing currency) | Extra Information |
|-----------------|----------------|------------|--|-------------------|
| Alipay 支付宝 | alipay.php | alipay | > MYR1.00 (MYR/USD/SGD/RMB/CNY) | e-wallet (CN) |
| UnionPay 银联 | GUPOP.php | GUPOP | > MYR1.00 (MYR/USD/CNY/AUD/CAD/EUR/ GBP/HKD/IDR/JPY/NZD/PHP/ SGD/THB/TWD/VND) | bank card |
| WeChat Pay 微信支付 | WeChatPay.php | WeChatPay | > MYR1.00 | e-wallet (CN) |
| Alipay+ | AlipayPlus.php | AlipayPlus | > MYR1.00 | e-wallet |

Remarks

1. Due to China Central Bank regulations, CNY(or RMB) is not able to be settled to an overseas bank account, these channels will use USD as default settlement currency. Besides USD, PG can also settle MYR, SGD via Alipay as well and PG will convert it to equivalent amount of settlement currency based on Maybank daily FX rate.

Taiwan

Default currency: TWD

| Channel Name | filename | channel | Payable Amount Range | Extra Information |
|----------------------|-------------------------|---------------------|----------------------|-------------------|
| ESUN Cash-711 | ESUN_Cash711.php | ESUN_Cash711 | >= 1.00 | OTC |
| ESUN Cash FamilyMart | ESUN_CashFamilyMart.php | ESUN_CashFamilyMart | >= 1.00 | OTC |
| ESUN ATM | ESUN_ATM.php | ESUN_ATM | >= 1.00 | Virtual Account |
| ESUN Cash Hi-Life | ESUN_CashHiLife.php | ESUN_CashHiLife | >= 1.00 | OTC |
| ESUN COD Family Mart | ESUN_CODFamilyMart.php | ESUN_CODFamilyMart | >= 1.00 | OTC |

Payment Page Integration

This is the traditional integration method which will send the buyer information to the payment gateway hosted payment page. You may want to explore *seamless integration*, *Direct Server API*, *mobile xdk* or supported shopping cart payment modules for better user experience beside this hosted payment page integration on github repositories. Recurring API is also available for card payment and DirectDebit.

Request Parameters

These parameters can be passed using either POST or GET method, or mixed of these methods. Please use UTF-8 encoding for all values.

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--|---|
| merchant_id | optional, alphanumeric | Merchant ID provided and it is on the request URL, otherwise need to pass this as parameter |
| amount | mandatory, integer or up to 2 decimal points numeric value | The total amount to be paid in one purchase order. Configurable to lock this field (Read-only). E.g. 500, 168.99, comma(,) is not allowed |
| orderid | mandatory, alphanumeric up to 40 characters | Invoice or order number from merchant system. Can be set to Read-only field. E.g. BH2018-09rev |
| bill_name | mandatory, alphanumeric, 128 chars | Buyer's full name. (Please do not pass in dummy data if you want to use the saved cards feature, as this info will be used to identify the ownership of the card's token. If you need to use dummy data, kindly refer to guest_checkout.) |
| bill_email | mandatory, email, 128 chars | Buyer's email address. Must be a valid email. (Please do not pass in dummy data if you want to use the saved cards feature, as this info will be used to identify the ownership of the card's token. If you need to use dummy data, kindly refer to guest_checkout.) |
| bill_mobile | mandatory, alphanumeric, 32 chars | Buyer's mobile number or contact number. Must be a valid mobile number. (Please do not pass in dummy data if you want to use the saved cards feature, as this info will be used to identify the ownership of the card's token. If you need to use dummy data, kindly refer to guest_checkout.) |
| guest_checkout | conditional, 0 or 1 | Used to indicate that this checkout does not belong to a registered user. Equal to 0 by default and 1 if the merchant does not hold the customer's bill_name, bill_email or bill_mobile. Saved card payment will disabled if set as 1. |
| bill_desc | mandatory, alphanumeric, 64kB | Purchase itemized list or order description. Try to avoid special characters so that the payment request is not blocked by the web application firewall. For Taiwan channels please refer to Guideline for Taiwan channels . |
| b_addr1 | optional, mandatory for specific channel | Billing address line 1 |

| | | |
|--------------|--|---|
| b_addr2 | optional, mandatory for specific channel | Billing address line 2 |
| b_zipcode | optional, mandatory for specific channel | Billing address zipcode or postcode |
| b_city | optional, mandatory for specific channel | Billing address city |
| b_state | optional, mandatory for specific channel | Billing address state |
| country | optional, 2 chars of ISO-3166 country code (Alpha-2) | Buyer's country E.g. MY for Malaysia. |
| vcode | conditional if accept open amount or order payment, such as virtual terminal is optional otherwise is mandatory. 32 chars hexadecimal string | This is the data integrity protection hash string. Refer vcode section for details. |
| currency | mandatory, 3 chars ISO-4217 currency code | Default payment currency from merchant site. E.g. MYR, USD, EUR, AUD, SGD, CNY, IDR |
| channel | optional, predefined string. Refer to the channel column in the Channel Lists. | Default payment page will be displayed without <i>channel</i> specified. |
| langcode | optional, predefined string. Currently only <i>en</i> for English & <i>cn</i> for Simplified Chinese. | Default language, i.e. English, will be displayed without the langcode specified. |
| returnurl | optional, URL | For selected merchants only. Used for multiple return URLs. This will slow down your payment request. Note : If the domain differs from the company's website domain, it must be registered to ensure proper functionality.(for security & data integrity) |
| callbackurl | optional, URL | Used for both multiple callback URL and Notification URL. Note : If the domain differs from the company's website domain, it must be registered to ensure proper functionality.(for security & data integrity) |
| cancelurl | optional, URL | Buyer will redirect to this URL if the buyer clicks the "Cancel" button to abandon payment before proceeding. No transaction will be created. Note : If the domain differs from the company's website domain, it must be registered to ensure proper functionality.(for security & data integrity) |
| s_name | optional, mandatory for specific channel | Receiver name |
| s_addr1 | optional, mandatory for specific channel | Delivery address line 1 |
| s_addr2 | optional, mandatory for specific channel | Delivery address line 2 |
| s_zipcode | optional, mandatory for specific channel | Delivery destination zipcode |
| s_city | optional, mandatory for specific channel | Delivery destination city |
| s_state | optional, mandatory for specific channel | Delivery destination state |
| s_country | optional, mandatory for specific channel | Delivery destination country |
| s_merchantID | conditional for partner | Partner's sub-merchant MID |

| | | |
|-----------------------|---|--|
| s_merchantURL | conditional for partner | Partner's sub-merchant URL |
| s_merchantMCC | conditional for partner | Partner's sub-merchant MCC |
| is_escrow | optional, for escrow payment | Set the value to 1 to indicate this is an escrow payment. Escrow transactions also can be set after the transaction has been created using escrow API. |
| non_3DS | conditional for partner, 0 or 1 | Applicable to card processing via specific processor using specific currency for pre-approved partners only. Equal to 0 by default and 1 for non-3DS transaction |
| tcctype | optional, for card type transaction | Available value is: SALS = Capture Transaction (Default) AUTH = Authorize Transaction (Please inform PG before starting using pre-auth) |
| token_status | optional | Default value will be 0. If the value is 1, the save card checkbox will be checked as default and can uncheck. If the value is 2, the save card checkbox will be checked as default and cannot uncheck. |
| hscl | optional | Default value will be 0. If the value is 1, then the card input form will not list out associated saved card |
| installmonth | optional, mandatory for installment payment | Total month of installment. E.g: 0, 3, 6, 12, 24 |
| cash_waittime | optional, integer | To overwrite the allowed waiting time for cash payment in hour(s), values greater than "Payment Expiry Time" in merchant profile will be capped. |
| split_info | optional, alphanumeric with pipe () as data delimiter and comma (,) as recipient separator | Used for "Alipay Split Payment". Format as below without '<' and '>':- <submer_ID> <amount>, <submer_ID> <amount> |
| AppDeeplink | optional, URL | Mobile deeplink/universal link that allows e-wallet In-App payment. |
| waittime | optional, integer | A countdown timer displayed on the buyer's browser. It defines when the payment page will be expired in second(s) and redirect to cancelurl after timeout |
| PaymentExpirationTime | optional, integer | For non-cash payment only. A timestamp (ISO 8601) that determines when the payment will expire, in UTC. Expired payment will be auto updated to failure. Any approved payment after the timeframe will be auto refunded to the buyer. Eg. 2023-12-31T23:59:59Z |
| metadata | optional, JSON, 64kb | Merchants are allowed to pass metadata for each transaction in JSON format only. Metadata that were passed via payment request will be returned in extraP parameters without any alteration in all of 3 endpoints so that merchants will be able to do the corresponding transaction mapping on their end. |

| | | |
|-------------|------------------------|--|
| lcpMemberId | optional, alphanumeric | Unique ID for Taiwan ESUN channels. Merchant will be able to retrieve it from the extraP parameter in the payment response. |
|-------------|------------------------|--|

Examples

Using PHP to generate a GET payment request

```
<?PHP
echo "<a href=https://pay.fiuu.com/RMS/pay/{merchantID}/?";
echo "amount=".$amount."&";
echo "orderid=".urlencode($oid)."&";
echo "bill_name=".urlencode($name)."&";
echo "bill_email=".urlencode($email)."&";
echo "bill_mobile=".urlencode($mobile)."&";
echo "bill_desc=".urlencode($description)."&";
echo "country=".$country."&";
echo "vcode=".$vcode."> Pay Now </a>";
?>
```

Using PHP to generate a POST form payment request

```
<?PHP
echo "<form action='https://pay.fiuu.com/RMS/pay/{merchantID}/' method=POST >";
echo "<input type=hidden      name=amount      value='$amount'>";
echo "<input type=hidden      name=orderid      value='$oid'>";
echo "<input type=hidden      name=bill_name    value='$name'>";
echo "<input type=hidden      name=bill_email   value='$email'>";
echo "<input type=hidden      name=bill_mobile  value='$mobile'>";
echo "<input type=hidden      name=bill_desc    value='$description'>";
echo "<input type=hidden      name=country     value='$country'>";
echo "<input type=hidden      name=vcode       value='$vcode'>";
echo "<input type=submit      value=' PAY NOW '>";
echo "</form>";
?>
```

Using ASP to generate a GET payment request

```
<%
dim amount,orderid,name,email,mobile,desc,country,vcode
amount  = "18.99"
orderid= "DG873MH370"
name    = "Mr Albert Anderson"
email   = "a.anderson@somewhere.com"
mobile  = "016-2341234"
desc    = "DIGI Reload Coupon RM20 with discount"
country= "MY"
```

```

vcode    = md5(amount & merchantID & orderid & xxxxxxxxxxxx )
// REPLACE xxxxxxxxxxxx with Verify Key
response.write("<a href=https://pay.fiuu.com/RMS/pay/{merchantID}/?")
response.write("amount=" & amount)
response.write("&orderid=" & orderid)
response.write("&bill_name=" & name)
response.write("&bill_email=" & email)
response.write("&bill_mobile=" & mobile)
response.write("&bill_desc=" & desc)
response.write("&country=" & country)
response.write("&vcode=" & vcode)
response.write("> Pay Now </a>")
%>

```

Using ASP to generate a POST form payment request

```

<%
dim amount, orderid, name, email, mobile, desc, country, vcode
amount    = "28.99"
orderid= "DG873MH37o"
name      = "Mr Samuel Lim"
email     = "sam.lim@nowhere.com"
mobile    = "86-232389872"
desc      = "Facebook Prepaid Reload Coupon RM30 with discount"
country= "CN"
vcode     = md5(amount & merchantID & orderid & xxxxxxxxxxxx )
// REPLACE xxxxxxxxxxxx with Verify Key
response.write("<form action='https://pay.fiuu.com/RMS/pay/{merchantID}/' method=POST >")
response.write("<input type=hidden name=amount value='&amount'>")
response.write("<input type=hidden name=orderid value='&orderid'>")
response.write("<input type=hidden name=bill_name value='&name'>")
response.write("<input type=hidden name=bill_email value='&email'>")
response.write("<input type=hidden name=bill_mobile value='&mobile'>")
response.write("<input type=hidden name=bill_desc value='&desc'>")
response.write("<input type=hidden name=country value='&country'>")
response.write("<input type=hidden name=vcode value='&vcode'>")
response.write("<input type=submit value=' PAY NOW '>")
response.write("</form>")
%>

```

Getting Payment Result

Payment results will be returned to the merchant system once payment is done or the user abandons the payment process. HTTP POST is the only method that payment gateway returns all parameters to a merchant's return URL for real-time status update, which the merchant can configure in merchant admin. Merchant system should block all other methods or parameters from an untrusted source.

Response Parameters

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|---------------------------------------|--|
| amount | 2 decimal points numeric value | The total amount paid or to be paid in Razer Cash payment request. |
| orderid | alphanumeric, 40 characters | Invoice or order number from merchant system. |
| tranID* | integer, 10-20 digits | Unique transaction ID for tracking purpose. This is an auto-incremental positive value, your DB structure has to be future-proof in case the maximum threshold is reached. |
| domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| status | string in 2-digit numeric | 00 for Successful payment, 11 for failed status, 22 if pending. |
| appcode | alphanumeric, 16 chars | Bank approval code. Mandatory for card payment. Certain channels return empty value. |
| error_code | alphanumeric | Refer to the Error Codes section. |
| error_desc | text | Error message or description. |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string. Refer skey section for details. |
| currency | 2 or 3 chars (ISO-4217) currency code | Default currency is MYR (indicating Malaysia Ringgit) for Malaysia channels. |
| channel | predefined string in PG system | Channel references for the merchant system. Refer to the below table. |
| paydate | Date/Time(YYYY-MM-DD HH:mm:ss) | Date/Time of the transaction. |
| extraP** | optional (on request) | Refer to section ExtraP for all the available values to be responded |

* For those who are using MySQL or MariaDB, recommended data type is unsigned BIGINT(20)

** This is a customizable parameter

Value of “channel” in return URL

| Card / Wallet | | |
|--|--|--|
| Malaysia & International | | |
| Credit/Debit/Prepaid card (Visa/MasterCard) Credit Razer Gold - Pay with Razer (PWR) MOLPoints WeChat Pay MY (Online) WeChatPayMY Maybank QRPay MB2U_QRPay-Push DuitNow QR RPP_DuitNowQR | Point BCard Point-BCard Webcash WEBCASH WeChat Pay MY (Offline) WeChatPayMY-Offline Touch N' Go E-WALLET TNG-EWALLET ShopBack ShopBack | PayPal PayPal Boost BOOST GrabPay GrabPay ShopeePay ShopeePay |
| Indonesia | | |
| Alipay+ DANA AlipayPlus_DANA e2Pay DANA e2Pay_DANA e2Pay LinkAja Web Checkout e2Pay_LINKAJA_WCO e2Pay ShopeePay e2Pay_SHOPEEPAY_JUMPAPP | e2Pay CIMB Octo Pay e2Pay_CIMB_OctoPay e2Pay LinkAja QRIS e2Pay_LINKAJA_QRIS e2Pay OVO e2Pay_OVO e2Pay GOPAY e2Pay_GOPAY | e2Pay CIMB QRIS e2Pay_CIMB_QRIS e2Pay LinkAja Applink e2Pay_LINKAJA_APPLINK e2Pay ShopeePay QRIS e2Pay_SHOPEEPAY_QRIS e2Pay MBayar QR e2Pay_MBayar_QR |
| China | | |
| Alipay (Online) Alipay Alipay+ AlipayPlus | WeChat Pay (Online) WeChatPay | WeChat Pay (Offline) WeChatPay-Offline |
| Thailand | | |
| Paysbuy paysbuy | Kbank Promptpay QR KBANK_THQR_PAYMENT | |
| Vietnam | | |
| Nganluong NGANLUONG VTC Pay eWallet & Banks VTCP_EWB 9Pay Debit Card 9PAY_DEBITCARD | VTC-Pay VTC-Pay VTC Pay eWallet & Credit Cards VTCP_EWC | VTC Pay eWallet VTCP_EW 9Pay eWallet 9PAY_EWALLET |

| Philippines | | |
|---|--|---|
| GCash GCash | Alipay+ GCash AlipayPlus_GCASH | ShopeePay ShopeePay |
| COINS.PH COINS_PH | QRPH QRPH | GrabPay PH GrabPay_PH |
| Indirect / Direct Internet Banking | | |
| Malaysia | | |
| FPX FPX RHB Now FPX_RHB / RHB-ONL Bank Islam FPX_BIMB Affin Online FPX_ABB / Affin-EPG myBSN FPX_BSN HSBC Online FPX_HSBC Bank Of China Online FPX_BOCM FPX B2B AmBank FPX_B2B_AMB FPX B2B United Overseas Bank FPX_B2B_UOB FPX B2B Maybank2E FPX_M2E FPX B2B RHB Bank FPX_B2B_RHB FPX B2B Deutsche Bank FPX_B2B_DEUTSCHE FPX B2B OCBC FPX_B2B_OCBC FPX DirectDebit FPX_DIRECTDEBIT FPX B2B Affin Max FPX_B2B_ABBM FPX B2B Public Bank Enterprise FPX_B2B_PBBE | Maybank2u FPX_MB2U / MB2u PBe FPX_PBB / PBeBank AmOnline FPX_AMB / AMB-W2W i-Muamalat FPX_BMMB OCBC Online FPX_OCBC Standard Chartered Online FPX_SCB FPX B2B Model FPX_B2B FPX B2B Affin Bank FPX_B2B_ABB FPX B2B CIMB Bank FPX_B2B_CIMB FPX B2B Public Bank FPX_B2B_PBB FPX B2B Alliance Bank FPX_B2B_ABMB FPX B2B Bank Muamalat FPX_B2B_BMMB Agrobank FPX_AGROBANK FPX B2B Citibank FPX_B2B_CITIBANK FPX B2B UOB Regional FPX_B2B_UOBR FPX DirectDebit FPX_DIRECTDEBIT_ABB | CIMB Clicks FPX_CIMBCLICKS / CIMB-Clicks Hong Leong Connect / PEx+ FPX_HLB / HLB-ONL / PEXPLUS Alliance online FPX_ABMB / ALB-ONL i-Rakyat FPX_BKRM UOB Online FPX_UOB KFH Online FPX_KFH FPX B2B Hong Leong FPX_B2B_HLB FPX B2B HSBC FPX_B2B_HSBC FPX B2B Bank Islam FPX_B2B_BIMB FPX B2B Kuwait Finance House FPX_B2B_KFH FPX B2B Standard Chartered FPX_B2B_SCB FPX e-Mandate FPX_EMANDATE FPX B2B Agrobank FPX_B2B_AGROBANK FPX B2B i-bizRAKYAT FPX_B2B_BKRM FPX e-Mandate FPX_EMANDATE_ABB |
| Singapore | | |

| | | |
|--|--|---|
| eNets Debit eNets-D | eNets Debit DBS Bank eNets-D_DBS | eNets Debit Standard Chartered Bank eNets-D_SCB |
| eNets Debit United Overseas Bank eNets-D_UOB | eNets Debit OCBC Bank eNets-D_OCBC | GrabPay (SGD) GrabPay_SG |
| <u>Philippines</u> | | |
| DragonPay Dragonpay | Bank of the Philippine Islands (BPI) BPI | UPAY UPAY |
| UnionBank Online (UPay) UPAY_UBO | PesoNet (UPay) UPAY_PCHC | Instapay (UPay) UPAY_INSTA |
| <u>Thailand</u> | | |
| Bangkok Bank BBL_IB & BBL_IB_U | Bank of Ayudhya (Krungsri) BAY_IB_U | Krung Thai Bank KTB_IB & KTB_IB_U |
| Siam Commercial Bank SCB_IB_U | OMISE OMISE | PromptPay Request to Pay KBANK_RTP |
| <u>Vietnam</u> | | |
| VTC Pay Banks VTCP_B | VTC Pay - Vietcombank VTCP_Vietcombank | VTC Pay - Techcombank VTCP_Techcombank |
| VTC Pay - MB VTCP_MB | VTC Pay - Vietinbank VTCP_Vietinbank | VTC Pay - Agribank VTCP_Agribank |
| VTC Pay - DongABank VTCP_DongABank | VTC Pay - Oceanbank VTCP_Oceanbank | VTC Pay - BIDV VTCP_BIDV |
| VTC Pay - SHB VTCP_SHB | VTC Pay - VIB VTCP_VIB | VTC Pay - MaritimeBank VTCP_MaritimeBank |
| VTC Pay - Eximbank VTCP_Eximbank | VTC Pay - ACB VTCP_ACB | VTC Pay - HDBank VTCP_HDBank |
| VTC Pay - NamABank VTCP_NamABank | VTC Pay - SaigonBank VTCP_SaigonBank | VTC Pay - Sacombank VTCP_Sacombank |
| VTC Pay - VietABank VTCP_VietABank | VTC Pay - VPBank VTCP_VPBank | VTC Pay - TienPhongBank VTCP_TienPhongBank |
| VTC Pay - SeaABank VTCP_SeaABank | VTC Pay - PGBank VTCP_PGBank | VTC Pay - Navibank VTCP_Navibank |
| VTC Pay - GPBank VTCP_GPBank | VTC Pay - BACABANK VTCP_BACABANK | VTC Pay - PHUONGDONG VTCP_PHUONGDONG |
| VTC Pay - ABBANK VTCP_ABBANK | VTC Pay - LienVietPostBank VTCP_LVPB | VTC Pay - BVB VTCP_BVB |
| 9Pay Bank Transfer 9PAY_BANKTRANSFER | | |
| <u>China</u> | | |
| Union Pay UPOP. | | |

| | | |
|--|---|---|
| <u>Indonesia</u> | | |
| e2Pay CIMB Octo Clicks Internet Banking e2Pay_CIMBOctoClicks_IB | e2Pay DBankPro Internet Banking e2Pay_DBankPro_IB | |
| Kiosk / Over-the-Counter / Cash / Bill Payment | | |
| <u>Malaysia</u> | | |
| 7-Eleven Cash-711 Jompay jompay | 99SpeedMart Cash-99SM Cash-in to PG Cash-Deposit CIMB Virtual Account CIMB-VA | Maybank ATM Cash-MBBATM |
| <u>Singapore</u> | | |
| SingPost ATM Cash-SAM | AXS Kiosk AXS | |
| <u>Indonesia</u> | | |
| e2Pay BNI Virtual Account e2Pay_BNI_VA e2Pay Permata Virtual Account e2Pay_PERMATA_VA | e2Pay CIMB Virtual Account e2Pay_CIMB_VA e2Pay Indomaret e2Pay_Indomaret | e2Pay Mandiri Virtual Account e2Pay_MANDIRI_VA e2Pay Alfamart e2Pay_Alfamart |
| <u>Philippines</u> | | |
| DragonPay Dragonpay Razer Cash PH Cash-PH | Bank of the Philippine Islands (BPI) BPI | |
| <u>Thailand</u> | | |
| Tesco Lotus Cash-TH Big Central Cash-TH | | |
| <u>Taiwan</u> | | |
| FamilyMart 全家便利商店 FAMILYMART | | |
| <u>Singapore</u> | | |
| Atome Atome | | |

| Indonesia | | |
|---|---|--|
| e2Pay Kredivo Financing e2Pay_Kredivo_FN | e2Pay Indodana Financing e2Pay_Indodana_FN | |

* Channel in yellow text means obsoleted

Merchant is strongly recommended to implement IPN(instant payment notification) in order to acknowledge(**ACK**) on the receiving of payment status from the payment gateway. There are 2 ways to implement IPN. Please refer to the IPN section for details.

Examples of Payment Endpoint

You may use the sample for all 3 endpoints, i.e. Return URL, Notification URL, and Callback URL by making little modification based on your own requirements.

Sample return URL script for PHP

```
<?php

$sec_key = "xxxxxxxxxxxx"; //Replace xxxxxxxxxxxx with Secret_Key

/*****
*Don't change below parameters
*****/
$stranID = $_POST['tranID'];
$orderid = $_POST['orderid'];
$status = $_POST['status'];
$domain = $_POST['domain'];
$amount = $_POST['amount'];
$currency = $_POST['currency'];
$appcode = $_POST['appcode'];
$paydate = $_POST['paydate'];
$key = $_POST['key'];

/*****
* To verify the data integrity sending by PG
*****/
$key0 = md5( $stranID.$orderid.$status.$domain.$amount.$currency );
$key1 = md5( $paydate.$domain.$key0.$appcode.$sec_key );

if( $key != $key1 ) $status= -1; // Invalid transaction.
// Merchant might issue a requery to PG to double check payment status

if ( $status == "00" ) {
    if ( check_cart_amt($orderid, $amount) ) {
        /*** NOTE : this is a user-defined function which should be prepared by merchant ***/
        // action to change cart status or to accept order
        // you can also do further checking on the paydate as well
        // write your script here .....
    }
} else {
    // failure action. Write your script here ....
    // Merchant might send query to PG using Merchant requery
    // to double check payment status for that particular order.
}

// Merchant is recommended to implement IPN once received the payment status
// regardless the status to acknowledge the PG
```

Sample return URL script for ASP/ASP.NET

```
<!--#include file="md5.asp"--> 'For ASP Developer
<!--#include file="md5.aspx"--> 'For ASP.NET Developer

<%
' md5.asp/md5.aspx is a 3rd party developed md5 solution for ASP/ASP.NET user
' You could get the md5.asp/md5.aspx from support@fiuu.com
' Some variables below are coming from POST method

dim key0, key1, tranID, orderid, status, merchantID, amount, currency, paydate, appcode, skey

tranID    = Request.Form("tranID")
orderid   = Request.Form("orderid")
status    = Request.Form("status")
merchantID = Request.Form("domain")
amount    = Request.Form("amount")
currency  = Request.Form("currency")
paydate   = Request.Form("paydate")
appcode   = Request.Form("appcode")
skey      = Request.Form("skey")
key0      = md5( tranID & orderid & status & domain & amount & currency )
key1      = md5( paydate & merchantID & key0 & appcode & "xxxxxxxxxxx" )
'Replace xxxxxxxxxxxx with Secret_Key

' invalid transaction if the key is different. Merchant might issue a requery to PG to double check payment status

If skey <> key1 then
    status= -1
End if

If status = "00" then
    ' checking the validity of cart amount & orderid.
    ' if the verification test passed then can update the order status to paid.
    ' you can also do further checking on the paydate as well
Else
    ' failure action
    ' Merchant might send query to PG using merchant requery
    ' to double check payment status for that particular order.
End if

' Merchant is to implement IPN to ack on receiving of payment status
' regardless the payment status

%>
```

Payment Status Notification (Merchant Webhook or the 3 Endpoints)

WARNING: Please note that multiple payment notifications (either from **return URL**, **Notification URL** or **callback URL**) for a single transaction is possible but this does not mean that the buyer has paid twice or multiple times. Additionally, if the domain used for these URLs differs from the company's website domain, it must be registered to ensure proper transaction handling.

Return URL with IPN (Instant Payment Notification)

For normal payment flow, the buyer browser is being redirected to a hosted payment page, financial institution or channel page(if any), and then returned to the merchant website or system. Users might close the browser any time throughout the payment process, even if the payment is completed, successfully or failed. Another possible reason that rarely happens is the network connectivity issue. As a result, the payment gateway is unable to update the merchant system on the payment status. Therefore, merchants are recommended to implement IPN to acknowledge(ACK) upon the receiving of status from gateway. Otherwise the callback worker will resend the payment status within a time interval.

Implementation:

Step 1: Login to the merchant portal, and go to tab Transactions -> Settings, fill in the Return URL, which must be starting with https. Return URL with IPN can be activated for better merchant-payment system communication. Check the checkbox beside "Enable Instant Payment Notification (IPN)", as shown below:

Step 2: There are 2 approaches to ack on receiving payment status.

1. Simple front-end snippet: copy the Javascript (JS) code from merchant admin and paste it on the merchant receipt page (which shows payment success/failed), preferable in the HTML header, before </head> tag.
2. Advanced back-end scripting: merchant is to echo back all the POST variables with one additional variable, i.e. "treq" with value 1. PHP sample code is provided below.

URL: <https://pay.fiuu.com/RMS/API/chkstat/returnipn.php>

Step 3: Merchant to prepare a **Notification URL** and **Callback URL** script, which is similar to return URL script but serves at the backend, in order to receive consequent payment notification in case the merchant system misses the first notification attempt from the payment gateway.

Example of back-end IPN script for PHP (combined with return URL script)

```
<?php

$sec_key = "xxxxxxxxxx"; //Replace xxxxxxxxxxxx with Secret_Key

$_POST[treq] = 1; // Additional parameter for IPN

// Value always 1. Do not change this value.
$tranID = $_POST['tranID'];
$orderid = $_POST['orderid'];
$status = $_POST['status'];
$domain = $_POST['domain'];
$amount = $_POST['amount'];
$currency = $_POST['currency'];
$appcode = $_POST['appcode'];
$paydate = $_POST['paydate'];
$key = $_POST['key'];

/*****
* Snippet code in purple color is the enhancement required
* by merchant to add into their return script in order to
* implement backend acknowledge method for IPN
*****/
while ( list($k,$v) = each($_POST) ) {
    $postData[] = $k."=".$v;
}
$postdata = implode("&", $postData);
$url = "https://pay.fiuu.com/RMS/API/chkstat/returnipn.php";
$ch = curl_init();
curl_setopt($ch, CURLOPT_POST, 1 );
curl_setopt($ch, CURLOPT_POSTFIELDS, $postData );
curl_setopt($ch, CURLOPT_URL, $url );
curl_setopt($ch, CURLOPT_HEADER, 1 );
curl_setopt($ch, CURLOPT_HEADER_OUT, TRUE );
curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1 );
curl_setopt($ch, CURLOPT_SSL_VERIFYPEER, FALSE );
curl_setopt($ch, CURLOPT_SSLVERSION, 6 ); // use only TLSv1.2
$result = curl_exec( $ch );
curl_close( $ch );

/*****
* To verify the data integrity sending by PG
*****/
$key0 = md5( $tranID.$orderid.$status.$domain.$amount.$currency );
$key1 = md5( $paydate.$domain.$key0.$appcode.$sec_key );
if( $key != $key1 ) $status = -1; // Invalid transaction
if ( $status == "00" ) {
    if ( check_cart_amt($orderid, $amount) ) {
        // write your script here .....
    }
} else {
    // failure action
}

?>
```

Notification URL with IPN

Direct payment status notification is a back-end instant update mechanism that sends over the payment status notification from gateway directly to the merchant server or system, without relying on any user agent such as web browser or mobile application.

Notification URL script is similar to return URL script but no output is required for front-end user interface. This is also known as background URL.

Implementation:

Step 1: Login to merchant portal and go to tab Transactions -> Settings, fill in the Notification URL, which must be starting with https. Notification URL with IPN can be activated for better merchant-payment system communication. Check the checkbox beside “Enable Instant Payment Notification (IPN)”, as shown below:



The screenshot shows a form with a dark blue label 'Notification URL' on the left. To its right is a text input field containing 'https://{YOUR NOTIFICATION URL}'. A 'Check' button is located to the right of the input field. Below the input field is a checkbox that is checked, followed by the text 'Enable Instant Payment Notification (IPN)'.

Step 2: Merchant to prepare a Notification URL script, which is similar to return URL script.

Step 3: If IPN is disabled please ignore this step. Merchants have to echo back all the POST variables with one additional variable, i.e. “*trreq*” with value 1. PHP sample code is provided below.

URL: <https://pay.fiuu.com/RMS/API/chkstat/returnipn.php>

Notification Parameters (via POST method)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|---------------------------------------|---|
| nbcdb | 1 digit numeric | Always equal to 2, which indicates this is a notification from PG |
| amount | 2 decimal points numeric value | The total amount paid or to be paid for Razer Cash payment request |
| orderid | alphanumeric, 40 characters | Invoice or order number from merchant system |
| tranID | integer, 10 digits | Unique transaction ID for tracking purpose |
| domain | alphanumeric, 32 chars | Merchant ID in PG system |
| status | 2-digit numeric value | 00 for Successful payment 11 for failed status |
| appcode | alphanumeric, 16 chars | Bank approval code. Mandatory for card payment. Certain channels return empty value. |
| error_code | alphanumeric | Refer to the Error Codes section. |
| error_desc | text | Error message or description. |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string. Refer <i>skey</i> section for details. |
| currency | 2 or 3 chars (ISO-4217) currency code | Default currency is MYR (indicating Malaysia Ringgit) for Malaysia channels |
| channel | predefined string in system | Channel references for merchant system |
| paydate | Date/Time(YYYY-MM-DD HH:mm:ss) | Date/Time of the transaction. |
| extraP* | optional (on request) | Refer to section ExtraP for all the available values to be responded |

*Note: Values are not URL encoded

Example of Notification URL with IPN script for PHP

```
<?php

$sec_key = "xxxxxxxx"; //Replace xxxxxxxx with Secret_Key

$_POST[treq] = 1; // Additional parameter for IPN. Value always set to 1.

/*****
*Don't change below parameters
*****/
$nbcb = $_POST['nbcb'];
$tranID = $_POST['tranID'];
$orderid = $_POST['orderid'];
$status = $_POST['status'];
$domain = $_POST['domain'];
$amount = $_POST['amount'];
$currency = $_POST['currency'];
$appcode = $_POST['appcode'];
$paydate = $_POST['paydate'];
$key = $_POST['key'];

/*****
* Snippet code in purple color is the enhancement required
* by merchant to add into their notification script in order to
* implement backend acknowledge method for IPN
*****/
while ( list($k,$v) = each($_POST) ) {
    $postData[] = $k."=".$v;
}
$postdata = implode("&",$postData);
$url = "https://pay.fiuu.com/RMS/API/chkstat/returnipn.php";
$ch = curl_init();
curl_setopt($ch, CURLOPT_POST, 1 );
curl_setopt($ch, CURLOPT_POSTFIELDS, $postData );
curl_setopt($ch, CURLOPT_URL, $url );
curl_setopt($ch, CURLOPT_HEADER, 1 );
curl_setopt($ch, CURLOPT_HEADER_OUT, TRUE);
curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1 );
curl_setopt($ch, CURLOPT_SSL_VERIFYPEER, FALSE);
curl_setopt($ch, CURLOPT_SSLVERSION, 6 ); // use only TLSv1.2
$result = curl_exec( $ch );
curl_close( $ch );

/*****
* To verify the data integrity sending by PG
*****/
$key0 = md5( $tranID.$orderid.$status.$domain.$amount.$currency );
$key1 = md5( $paydate.$domain.$key0.$appcode.$sec_key );
if( $key != $key1 ) $status = -1; // Invalid transaction
if ( $status == "00" ) {
    if ( check_cart_amt($orderid, $amount) ) {
        // write your script here .....
    }
} else {
    // failure action
}

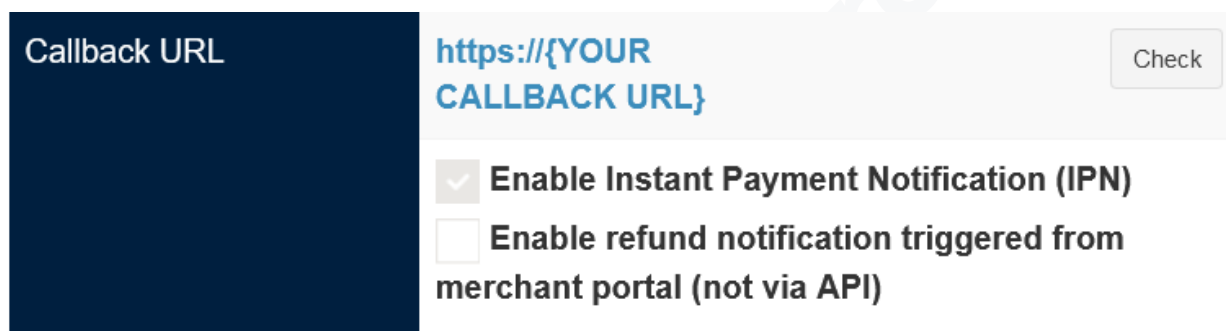
?>
```


Callback URL with IPN

Callback mechanism is a back-end activity that is initiated by payment gateway to notification the merchant system once there are changes on any payment status.

Callback URL script is similar to return URL script. Both handle the payment status result; Unlike the return URL script, callback URL script is to handle defer status update or all other non-realtime payment status updates, such as Fiuu Cash payment.

Merchant must fill the Callback URL which must be starting with https in merchant portal in order to get those non-realtime status update from the gateway. Callback URL IPN can be activated for better merchant-payment system communication. Instead of returning all parameters from the gateway, merchant's callback script just need to echo "CBTOKEN:MPSTATOK", in plaintext, without double quotes or any HTML tags.



Callback URL

<https://{YOUR CALLBACK URL}> Check

☒ **Enable Instant Payment Notification (IPN)**

☐ **Enable refund notification triggered from merchant portal (not via API)**

Merchant can actually use the same script for both callback URL & return URL, because there is only one extra parameter in callback request, in addition to return URL parameters, which is "nbc". Besides, an additional status code, 22 has been introduced for "pending" transaction status.

Once there is a status changed event, payment gateway will POST the following parameters to merchant callback URL. If the payment gateway could not get the actual ACK message from the merchant, it will retry for a maximum 3 times, of 15 minutes interval for each attempt.

Callback Parameters (via POST method)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|---------------------------------------|--|
| nbcb | 1 digit numeric | Always equal to 1, which indicates this is a callback notification from PG |
| amount | 2 decimal points numeric value | The total amount paid or to be paid for Razer Cash payment request |
| orderid | alphanumeric, 40 characters | Invoice or order number from merchant system. |
| tranID | integer, 10 digits | Unique transaction ID for tracking purpose |
| domain | alphanumeric, 32 chars | Merchant ID in PG system |
| status | 2-digit numeric value | 00 for Successful payment 11 for failed status |
| appcode | alphanumeric, 16 chars | Bank approval code. Mandatory for card payment. Certain channel returns empty value |
| error_code | alphanumeric | Refer to the Error Codes section |
| error_desc | text | Error message or description |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string. Refer <i>skey</i> section for details |
| currency | 2 or 3 chars (ISO-4217) currency code | Default currency is MYR (indicating Malaysia Ringgit) for Malaysia channels |
| channel | predefined string in system | Channel references for merchant system |
| paydate | Date/Time(YYYY-MM-DD HH:mm:ss) | Date/Time of the transaction |
| extraP* | optional (on request) | Refer to section ExtraP for all the available values to be responded |

*Note: Values are not URL encoded

Example of callback URL script for PHP

```
<?php

$sec_key = "xxxxxxxx"; //Replace xxxxxxxx with Secret_Key

$nbcb      = $_POST['nbcb'];
$tranID    = $_POST['tranID'];
$orderid    = $_POST['orderid'];
$status    = $_POST['status'];
$domain    = $_POST['domain'];
$amount    = $_POST['amount'];
$currency  = $_POST['currency'];
$appcode   = $_POST['appcode'];
$paydate   = $_POST['paydate'];
$key       = $_POST['key'];

/*****
* To verify the data integrity sending by PG
*****/
$key0 = md5( $tranID.$orderid.$status.$domain.$amount.$currency );
$key1 = md5( $paydate.$domain.$key0.$appcode.$sec_key );
if( $key != $key1 ) $status= -1; // Invalid transaction

if ( $status == "00" ) {
    if ( check_cart_amt($orderid, $amount) ) {
        // write your script here .....
    }
} else {
    // failure action
    // write your script here .....
}

if ( $nbcb==1 ) {
    //callback IPN feedback to notified PG
    echo "CBTOKEN:MPSTATOK"; exit;
} else {
    //normal IPN and redirection
}
?>
```

Value of “channel” in notification and callback URL

| Card / Wallet | | |
|--|--|--|
| Malaysia & International | | |
| Credit/Debit/Prepaid card (Visa/MasterCard) credit Razer zGold - Pay with Razer (PWR) MOLPoints WeChat Pay MY (Online) WeChatPayMY Maybank QRPAY MB2U_QRPAY-Push DuitNow QR RPP_DuitNowQR | Point BCard Point-BCard Webcash webcash WeChat Pay MY (Offline) WeChatPayMY-Offline Touch N' Go E-WALLET TNG-EWALLET ShopBack ShopBack | PayPal paypal Boost BOOST GrabPay GrabPay ShopeePay ShopeePay |
| Indonesia | | |
| Alipay+ DANA AlipayPlus_DANA e2Pay DANA e2Pay_DANA e2Pay LinkAja Web Checkout e2Pay_LINKAJA_WCO e2Pay ShopeePay e2Pay_SHOPEEPAY_JUMPAPP | e2Pay CIMB QRIS e2Pay_CIMB_QRIS e2Pay LinkAja Applink e2Pay_LINKAJA_APPLINK e2Pay ShopeePay QRIS e2Pay_SHOPEEPAY_QRIS e2Pay GOPAY e2Pay_GOPAY | e2Pay CIMB Rekening Ponsel e2Pay_CIMB_Rekening_Ponsel e2Pay LinkAja QRIS e2Pay_LINKAJA_QRIS e2Pay OVO e2Pay_OVO e2Pay MBayar QR e2Pay_MBayar_QR |
| China | | |
| Alipay (Online) alipay Alipay+ AlipayPlus | WeChat Pay (Online) WeChatPay | WeChat Pay (Offline) WeChatPay-Offline |
| Thailand | | |
| Paysbuy paysbuy | Kbank Promptpay QR KBANK_THQR_PAYMENT | |
| Vietnam | | |
| Nganluong nganluong VTC Pay eWallet & Banks VTCPay-eWalletBank 9Pay Debit Card 9PAY_DEBITCARD | VTC-Pay VTCPay VTC Pay eWallet & Credit Cards VTCPay-eWalletCreditCard | VTC Pay eWallet VTCP_EW 9Pay eWallet 9PAY_EWALLET |

| Philippines | | |
|--|--|---|
| GCash GCash | Alipay+ GCash AlipayPlus_GCASH | ShopeePay ShopeePay |
| COINS.PH COINS_PH | QRPH QRPH | PayMaya eWallet PayMaya e-wallet |
| Grab Pay GrabPay | GrabPay (PHP) GrabPay_PH | |
| Singapore | | |
| GrabPay (SGD) GrabPay_SG | | |
| Indirect / Direct Internet Banking | | |
| Malaysia | | |
| FPX fpx | Maybank2u maybank2u / maybank2u | CIMB Clicks cimb / cimb |
| RHB Now rhb / rhb | PBe publicbank / publicbank | Hong Leong Connect / PEx+ hlb / hlb / PEXPLUS |
| Bank Islam bankislam | AmOnline amb / amb | Alliance online alliancebank / alliancebank |
| Affin Online abb / affin-epg | i-Muamalat muamalat | i-Rakyat bkrm |
| myBSN bsn | OCBC Online ocbc | UOB Online uob |
| HSBC Online hsbc | Standard Chartered Online scb | KFH Online kuwait-finace |
| Bank Of China Online bocm | FPX B2B Model FPX_B2B | FPX B2B Hong Leong FPX_B2B_HLB |
| FPX B2B AmBank FPX_B2B_AMB | | FPX B2B HSBC FPX_B2B_HSBC |
| FPX B2B United Overseas Bank FPX_B2B_UOB | FPX B2B Affin Bank FPX_B2B_ABB | FPX B2B Bank Islam FPX_B2B_BIMB |
| FPX B2B Maybank2E FPX_M2E | FPX B2B CIMB Bank FPX_B2B_CIMB | FPX B2B Kuwait Finance House FPX_B2B_KFH |
| FPX B2B RHB Bank FPX_B2B_RHB | FPX B2B Public Bank FPX_B2B_PBB | FPX B2B Standard Chartered FPX_B2B_SCB |
| FPX B2B Deutsche Bank FPX_B2B_DEUTSCHE | FPX B2B Alliance Bank FPX_B2B_ABMB | FPX e-Mandate FPX_EMANDATE |
| FPX B2B OCBC FPX_B2B_OCBC | FPX B2B Bank Muamalat FPX_B2B_BMMB | FPX DirectDebit FPX_DIRECTDEBIT_ABB |
| FPX DirectDebit FPX_DIRECTDEBIT | FPX e-Mandate FPX_EMANDATE_ABB | |

| <u>Singapore</u> | | |
|---|--|--|
| eNets Debit enetsD | | |
| <u>Philippines</u> | | |
| Bank of the Philippine Islands (BPI) BPI PesoNet (UPay) UPAY_PCHC | UPAY UPAY Instapay (UPay) UPAY_INSTA | UnionBank Online (UPay) UPAY_UBO |
| <u>Thailand</u> | | |
| Bangkok Bank TH_BBLPN / BBL_IB & BBL_IB_U Siam Commercial Bank TH_SCBPN | Bank of Ayudhya (Krungsri) TH_BAYPN / BAY_IB_U OMISE OMISE | Krung Thai Bank TH_KTBPN / KTB_IB & KTB_IB_U |
| <u>Vietnam</u> | | |
| VTC Pay Banks VTCPay-Bank VTC Pay - MB VTCPay-MB VTC Pay - DongABank VTCPay-DongABank VTC Pay - SHB VTCPay-SHB VTC Pay - Eximbank VTCPay-Eximbank VTC Pay - NamABank VTCPay-NamABank VTC Pay - VietABank VTCPay-VietABank VTC Pay - SeaABank VTCPay-SeaABank VTC Pay - GPBank VTCPay-GPBank VTC Pay - ABBANK VTCPay-ABBANK 9Pay Bank Transfer 9PAY_BANKTRANSFER | VTC Pay - Vietcombank VTCPay-Vietcombank VTC Pay - Vietinbank VTCPay-Vietinbank VTC Pay - Oceanbank VTCPay-Oceanbank VTC Pay - VIB VTCPay-VIB VTC Pay - ACB VTCPay-ACB VTC Pay - SaigonBank VTCPay-SaigonBank VTC Pay - VPBank VTCPay-VPBank VTC Pay - PGBank VTCPay-PGBank VTC Pay - BACABANK VTCPay-BACABANK VTC Pay - LienVietPostBank VTCPay-LienVietPostBank | VTC Pay - Techcombank VTCPay-Techcombank VTC Pay - Agribank VTCPay-Agribank VTC Pay - BIDV VTCPay-BIDV VTC Pay - MaritimeBank VTCPay-MaritimeBank VTC Pay - HDBank VTCPay-HDBank VTC Pay - Sacombank VTCPay-Sacombank VTC Pay - TienPhongBank VTCPay-TienPhongBank VTC Pay - Navibank VTCPay-Navibank VTC Pay - PHUONGDONG VTCPay-PHUONGDONG VTC Pay - BVB VTCPay-BVB |
| <u>China</u> | | |
| Union Pay unionpay | | |

| | | |
|---|--|--|
| <u>Australia</u> | | |
| POLi Payment polipayment | | |
| <u>Indonesia</u> | | |
| e2Pay CIMB Octo Clicks Internet Banking e2Pay_CIMBOctoClicks_IB | e2Pay DBankPro Internet Banking e2Pay_DBankPro_IB | |
| Kiosk / Over-the-Counter / Cash / Bill Payment | | |
| <u>Malaysia</u> | | |
| 7-Eleven cash Esapay Cash Retail esapay Jompay jompay | 99SpeedMart cash99 Cash-in to PG Cash-Deposit CIMB Virtual Account CIMB-VA | Petronas epay Maybank ATM Cash-MBBATM |
| <u>Singapore</u> | | |
| SingPost ATM singpost | AXS Kiosk AXS | |
| <u>Indonesia</u> | | |
| e2Pay CIMB Virtual Account e2Pay_CIMB_VA e2Pay Indomaret e2Pay_Indomaret | e2Pay Mandiri Virtual Account e2Pay_MANDIRI_VA e2Pay Alfamart e2Pay_Alfamart | e2Pay BNI Virtual Account e2Pay_BNI_VA e2Pay Permata Virtual Account e2Pay_PERMATA_VA |
| <u>Philippines</u> | | |
| DragonPay dragonpay | | |
| <u>Thailand</u> | | |
| Tesco Lotus Cash-TH | Big Central BigC | |
| <u>Taiwan</u> | | |
| FamilyMart 全家便利商店 FAMILYMART | | |
| <u>Singapore</u> | | |
| Atome Atome | | |

| Indonesia | | |
|---|---|--|
| e2Pay Kredivo Financing e2Pay_Kredivo_FN | e2Pay Indodana Financing e2Pay_Indodana_FN | |

* Channel in yellow text means the channel had been obsoleted

TL;DR?

SUMMARY ON INTEGRATION, 3 ENDPOINTS AND IPN

INTEGRATION

- 1) Hosted payment page or normal integration: HTTP POST/GET with all required parameters, either to default payment channel page or to specific channel page, merchant can allow or disallow the buyer to change payment method (PDF)
- 2) Seamless Integration: popup page or lightbox on merchant checkout flow, as simple as modifying the JavaScript snippet that could be found on [GitHub](#)
- 3) Mobile xdk: support variety of mobile development platforms and available on [GitHub](#)
- 4) Direct Server API: server-to-server request that allows merchant to handle all the UI/UX with higher flexibility and controllability (PDF)
- 5) Recurring API: server-to-server request that allows merchant initiated transaction (MIT) to debit buyer account anytime (PDF)
- 6) Offline Payment API: For in-store e-wallet payment acceptance on POS/terminal (PDF)
- 7) ISO Message Interface: For card acceptance terminal vendor (restricted PDF)

3 ENDPOINTS for payment response notification (For integration 1-6 only)

- 1) Return URL: realtime web browser or frontend direction endpoint for hosted page, seamless integration, and shopping cart module
- 2) Notification URL (webhook): real-time server-to-server or backend endpoint for all kind of integrations
- 3) Callback URL (webhook): defer update or callback endpoint on non-real time payment such as Razer Cash

IPN

- 1) **Frontend** IPN, applicable to return URL endpoint only: using JavaScript, you may copy from the snippet code from your merchant portal, note that **trreq=0**
- 2) **Backend** IPN for return URL and Notification URL: post back all parameters with additional parameter **trreq=1** to **returnipn.php**
- 3) IPN for **callback** URL: just echo "**CBTOKEN:MPSTATOK**", without the quote("")

Comparison Chart

For **online** payment, merchant to decide which approaches fit the business requirements

| Integration approach | Hosted payment page | Seamless integration | Inpage checkout | Mobile xdk | Direct server API + CSE | Recurring API |
|--------------------------|----------------------------|----------------------------|------------------------------------|-----------------------------|-------------------------------|-------------------------------|
| Browser dependency | Yes, popup and redirection | Yes, popup and redirection | Yes, iframe, popup and redirection | Smartphone built-in browser | Depends | No |
| UI/UX | Moderate | Better | Better | Best for mobile | Handled by merchant | Handled by merchant |
| Time to market (man-day) | 1-7 | 2-14 | 2-14 | 2-14 | 5-60 | 10-90 |
| Suitable for | Fast and easy deployment | Better UX | Better UX | In-app purchase | Better UI & UX | Subscription or billing |
| Mobile readiness | RWD | RWD | RWD | Native / hybrid | Backend only | Backend only |
| PCI-DSS compliant | PG | PG | PG | PG | PG / Merchant if handling PAN | PG / Merchant if handling PAN |
| Availability on github | 20/22 of the cart modules | 6/22 of the cart modules | Yes | 12 dev-tools supported | nil | nil |
| Available endpoints | all 3 endpoints | all 3 endpoints | all 3 endpoints | notification & callback URL | all 3 endpoints | notification & callback URL |
| Fraud screening | By PG | By PG | By PG | By PG | By merchant | By merchant |

For response handling, setup these endpoints(webhook) to capture the payment response

| Response endpoint | Return URL | Notification URL | Callback URL |
|-----------------------|--|--|-----------------------------------|
| Browser dependency | Yes | No | No |
| Payment type response | Realtime payment | Realtime payment | Cash payment / defer update |
| Reliability | Low | High | High |
| Security | Low if payment verification is not enabled | High | High |
| IPN implementation | Frontend: easier to implement using JS snippet with req=0 Backend: POST back all values + req=1 to returnipn.php, more reliable | Backend: POST back all values + req=1 to returnipn.php | Backend: echo "CBTOKEN: MPSTATOK" |

MERCHANT REQUEST APIs

PG has prepared plenty of merchant tools for merchants to initiate status query and cancellation/void of transaction. However, merchants are not allowed to send in requests too frequently (maximum 1 query every 5 seconds). Massive incoming query will lead to IP blocking without prior notice. There will be a validity duration to initiate a status query API call, generally within **1 hour** after the initiated time for online payment and the due time for offline payment.

The back-end services available are:-

1. Direct Status Query - merchant send status query to processing bank directly
2. Indirect Status Query - merchant send status query to PG system
3. Daily Transaction Report (Reconciliation) - list all transactions of a specific date
4. Settlement Report (Reconciliation) - settlement details
5. Capture Request - to capture any pre-auth or authorized transaction
6. Reversal Request - merchant to cancel or void a transaction or refund of payment
7. Partial Refund - for merchant who requires partial refund only
8. Partial Refund Status Inquiry by Txn ID
9. Channel Status API
10. Card BIN information API
11. Foreign Exchange Rate API
12. Void Pending-Cash API
13. Recurring Plans API

Notes:

W.e.f 19th October 2017, Razer Merchant Services will migrate all none payment-flow related service APIs to a new FQDN: <https://api.molpay.com> (and now changed to <https://api.fiuu.com>)
from the original <https://www.onlinepayment.com.my>

W.e.f 1st November 2017, Razer Merchant Services will shutdown all none payment-flow related service APIs on <https://www.onlinepayment.com.my>

For sandbox environment, use <https://sandbox-payment.fiuu.com>

Direct Status Requery

This will trigger a query to the payment channel or bank status server and there are cases that bank status server is not in-sync with its payment server that might give different results, that leads to a defer update and will trigger a callback from PG server, once the status is synced and changed.

Note : No result available for transactions more than 1 day or 24 hours.

Request

URL: <https://api.fiuu.com/RMS/API/gate-query/index.php>

Method: POST or GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--|---|
| amount | 2 decimal points numeric value | The payment amount |
| txID | integer, 20 digits | Unique transaction ID for tracking purpose. |
| domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string. |
| url | optional, URL for POST response | The URL to receive POST response from PG |
| type | optional, 1-digit integer, obsoleted in new API sets | 0 = plain text result (default) 1 = result via POST method 2 = JSON text result |

Response

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------------|--|
| Amount | 2 decimal points numeric value | The payment amount |
| TranID | integer, 20 digits | Unique transaction ID for tracking purpose. |
| Domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| Channel | alphanumeric, 100 chars | Payment via Channel |
| VrfKey | 32 chars hexadecimal string | This is the data integrity protection hash string. |
| StatCode | string of 2-digit numeric | 00 = Success 11 = Failure 22 = Pending |
| StatName | alphanumeric | Success: captured, settled, authorized Failure: failed, cancelled, chargeback, release, reject/hold, blocked, ReqCancel, ReqChargeback Pending: Pending, Unknown |
| Currency | 3 chars ISO-4217 currency code | The payment currency. E.g. MYR, USD, EUR, AUD, SGD, CNY, IDR |
| ErrorCode | alphanumeric | Error code defined by channel for failed transactions only |

| | | |
|-----------------------|--------------|---|
| ErrorDesc | alphanumeric | Error description defined by channel for failed transactions only |
| ProcessorResponseCode | alphanumeric | Authorization response code |
| ProcessorCVVResponse | alpha | Credit Card validation response code |
| SchemeTransactionID | alphanumeric | Transaction ID provided by CC Schemes. |
| MerchantAdviceCode | numeric | MasterCard issuers use the Merchant Advice Code (MAC) in authorization request responses to communicate with merchants about a cardholder's account |
| ECI | numeric | Electronic Commerce Indicator (ECI) is a value returned by Directory Servers (namely Visa, MasterCard, MyDebit, JCB, and American Express) indicating the outcome of authentication attempted on transactions enforced by 3DS |
| 3DSVersion | alphanumeric | Version of the 3DS use to authenticate the transaction |
| ACSTransactionID | alphanumeric | ACS transaction identifier |
| 3DSTransactionID | alphanumeric | 3DS transactions identifier |

Formula of skey & VrfKey

$skey = md5(\{txID\}\{domain\}\{verify_key\}\{amount\})$
 $VrfKey = md5(\{Amount\}\{secret_key\}\{Domain\}\{TranID\}\{StatCode\})$

Example of Direct Status Requery for PHP

```
<?php
$key = md5($txID . $domain. "xxxxxxxx" . $amount);
//Replace xxxxxxxxxx with Verify Key

echo "<a
href='https://api.fiuu.com/RMS/API/gate-query/index.php?amount=3899&txID=65234&domain=shopA&key=e1c4c60c99116ffc3ce77bd5fd0f7b1'>
Check payment status for tran ID 65234 </a>";

?>
```

Example of response

| type=0 (default output, plain text with linebreaks) | type=1 (POST result sent to URL) | type=2 (JSON text) |
|---|--|---|
| StatCode=00 StatName=captured TranID=65234 Amount=3899.00 Domain=shopA Channel=fpX VrfKey=456cf69e5bddfe8ed47371096 Currency=MYR ErrorCode= ErrorDesc= | \$_POST [StatCode] => "00"; \$_POST [StatName] => "captured"; \$_POST [TranID] => "65234"; \$_POST [Amount] => "3899.00"; \$_POST [Domain] => "shopA"; \$_POST [Channel] => "fpX"; \$_POST [VrfKey:]=> "456cf69e5bddfe8ed47371096"; \$_POST [Currency] => "MYR"; \$_POST [ErrorCode] => ""; \$_POST [ErrorDesc] => ""; | { "StatCode": "00", "StatName": "captured", "TranID": "65234", "Amount": "3899.00", "Domain": "shopA", "Channel": "fpX", "VrfKey": "456cf69e5bddfe8ed47371096", "Currency": "MYR", "ErrorCode": null, "ErrorDesc": null } |

Indirect Status Requery

There are several types of status requery on PG system:-

| Description & Script | Max Result Count | Performance | Rate Limit (Req/Sec) | Data Range (Hour or Day) |
|--|------------------|-------------|----------------------|--------------------------|
| Query by unique transaction ID: q_by_tid | 1 | Fast | 30 | 180D |
| Query by order ID : q_by_oid | 1 | Moderate | 10 | 30D |
| Query by order ID & get 10 latest matched results: q_oid_batch | 10 | Slow | 5 | 24H / 1D |
| Query by multiple order ID: q_by_oids | 10 | Slow | 5 | 24H / 1D |
| Query by multiple transaction ID: q_by_tids | 10 | Moderate | 10 | 30D |

Status inquiry is a backup approach to get a final payment status in a proactive way, yet a more reliable integration should be established using 3 endpoints or webhooks to obtain real-time passive notification from the PG.

For bulk requery, best practice is to utilize one of these APIs once every half an hour for transactions with pending and unknown status only. Excessive and rapid API calls will be blocked without prior notice.

Note : No result available for transactions created more than 24 hours, 30 or 180 days, depending on the API respectively.

1. Query by unique transaction ID

Request

URL: https://api.fiuu.com/RMS/q_by_tid.php

Method: POST or GET

* Request & Response parameters are the same as Direct Status Requery but the format and parameters order of the responses are slightly different.

Example of response

| type=0 (default output, plain text with linebreaks) | type=1 (POST result sent to URL) | type=2 (JSON text) |
|---|---|---|
| StatCode: 00 StatName: captured TranID: 10645406 Amount: 138.99 Domain: ShopB VrfKey: 9862acf1099b625c00b225887e715861 Channel: credit OrderID: ABC123 Currency: MYR ErrorCode: ErrorDesc: | \$_POST [StatCode] => "00"; \$_POST [StatName] => "captured"; \$_POST [TranID] => "10565234"; \$_POST [Amount] => "3899.00"; \$_POST [Domain] => "shopC"; \$_POST [VrfKey:] => "456cf69e5bddfe8ed47371096"; \$_POST [Channel] => "credit"; \$_POST [OrderID] => "ABC123"; \$_POST [Currency] => "MYR"; \$_POST [ErrorCode] => ""; \$_POST [ErrorDesc] => ""; | { "StatCode": "00", "StatName": "captured", "TranID": "10565234", "Amount": "3899.00", "Domain": "shopC", "Channel": "credit", "VrfKey": "456cf69e5bddfe8ed47371096", "Currency": "MYR", "ErrorCode": null, "ErrorDesc": null } |

2. Query by order ID (single output)

Request

URL: https://api.fiuu.com/RMS/query/q_by_oid.php

Method: POST or GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|-------------------------------------|---|
| amount | 2 decimal points numeric value | The payment amount |
| oid | alphanumeric, 32 chars | Merchant order ID, which might be duplicated. |
| domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string. |
| url | Conditional , URL for POST response | The URL to receive POST response from PG, it is mandatory for type=1 |
| type | optional, 1-digit integer | 0 = plain text result (default) 1 = result via POST method 2 = JSON text result |
| req4token | optional, 1-digit integer | 0 = No (default) 1 = Yes for more card related information |
| req4terminal | optional, 1-digit integer | 0 = No (default) 1 = Yes to return TerminalID |
| req4duitnow | optional, 1-digit integer | 0 = No (default) 1 = Yes to return DuitNow extra information |

Response

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------------|---|
| StatCode | string of 2-digit numeric | 00 = Success 11 = Failure 22 = Pending |
| StatName | alphanumeric | Success: captured, settled, authorized Failure: failed, canceled, chargeback, release, reject/hold, blocked, ReqCancel, ReqChargeback Pending: Pending, Unknown |
| OrderID | alphanumeric, 40 chars | Invoice or order number from merchant system. |
| Amount | 2 decimal points numeric value | The payment amount |
| TranID | integer, 10 digits | Unique transaction ID for tracking purpose. |
| Domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| BillingDate | date (YYYY-MM-DD HH:mm:ss) | Transaction date/time |
| BillingName | alphanumeric, 128 chars | Buyer full name |
| VrfKey | 32 chars hexadecimal string | This is the data integrity protection hash string. |

| | | |
|-----------------------|---|---|
| Channel | alphanumeric | Payment via channel |
| Currency | 3 chars ISO-4217 currency code | The payment currency. E.g. MYR, USD, EUR, AUD, SGD, CNY, IDR |
| ErrorCode | alphanumeric | Error code defined by channel for failed transactions only |
| ErrorDesc | alphanumeric | Error description defined by channel for failed transactions only |
| token | Alphanumeric with symbols up to 50 chars (optional, with req4token=1) | Card payment only: if PAN has been tokenized |
| ccbrand | optional, with req4token=1 | Card payment only: Visa, MasterCard, AMEX |
| cclast4 | optional, 4-digit numeric with req4token=1 | Card payment only: Last 4-digit of PAN |
| cctype | optional, with req4token=1 | Card payment only: Credit, Debit, Prepaid |
| NumberOfInstalment | Integer, 2 digits | Number of Installment Months |
| MonthlyPayment | 2 decimal points numeric value | Monthly Installment Amount |
| TotalFees | 2 decimal points numeric value | Total fees to be charged for installment |
| ProcessorResponseCode | alphanumeric | Authorization response code |
| ProcessorCVVResponse | alpha | Credit Card validation response code |
| SchemeTransactionID | alphanumeric | Transaction ID provided by CC Schemes. |
| MerchantAdviceCode | numeric | MasterCard issuers use the Merchant Advice Code (MAC) in authorization request responses to communicate with merchants about a cardholder's account |
| ECI | numeric | Electronic Commerce Indicator (ECI) is a value returned by Directory Servers (namely Visa, MasterCard, MyDebit, JCB, and American Express) indicating the outcome of authentication attempted on transactions enforced by 3DS |
| 3DSVersion | alphanumeric | Version of the 3DS use to authenticate the transaction |
| ACSTransactionID | alphanumeric | ACS transaction identifier |
| 3DSTransactionID | alphanumeric | 3DS transactions identifier |
| TerminalID | alphanumeric, optional, with req4terminal=1 | Terminal ID of the transaction |
| DbtrAgt | alphanumeric, optional, with req4duitnow=1 | Debtor BIC code |
| DbtrAcct_Type | alphanumeric, optional, with req4duitnow=1 | Debtor account type |

| | | |
|---------|--|-------------------------|
| TxnType | alphanumeric, optional, with req4duitnow=1 | Debtor transaction type |
|---------|--|-------------------------|

Formula of skey & VrfKey

```

skey =md5( {oID}{domain}{verify_key}{amount} )
VrfKey=md5( {Amount}{secret_key}{Domain}{OrderID}{StatCode} )

```

3. Query by order ID (batch output)

Request

URL: https://api.fiuu.com/RMS/query/q_oid_batch.php

Method: POST or GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--|---|
| oID | alphanumeric, 32 chars | Merchant order ID, which might be duplicated. |
| domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string. |
| url | optional, URL for POST response | The URL to receive POST response from PG |
| type | optional, 1-digit integer | 0 = plain text result (default) 1 = result via POST method 2 = JSON text result |
| format | optional, 1-digit integer, for type=1 only | 0 = result string with delimiter () 1 = result in array |
| req4token | optional, 1-digit integer | 0 = No (default) 1 = Yes for more card related information |
| req4terminal | optional, 1-digit integer | 0 = No (default) 1 = Yes to return TerminalID |
| req4duitnow | optional, 1-digit integer | 0 = No (default) 1 = Yes to return DuitNow extra information |
| fields | optional, predefined string | channel = return Payment via Channel |

Response

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|----------------------------|---|
| TranID | integer, 20 digits | Unique transaction ID for tracking purpose. |
| BillingDate | date (YYYY-MM-DD HH:mm:ss) | Transaction date |
| StatCode | string of 2-digit numeric | 00 = Success |

| | | |
|-----------------------|---|---|
| | | 11 = Failure 22 = Pending |
| StatName | alphanumeric | Success: captured, settled, authorized Failure: failed, cancelled, chargeback, release, reject/hold, blocked, ReqCancel, ReqChargeback Pending: Pending, Unknown |
| Amount | 2 decimal points numeric value | The payment amount |
| BillingName | alphanumeric, 128 chars | Buyer full name |
| Currency | 3 chars ISO-4217 currency code | The payment currency. E.g. MYR, USD, EUR, AUD, SGD, CNY, IDR |
| ErrorCode | alphanumeric | Error code defined by channel for failed transactions only |
| ErrorDesc | alphanumeric | Error description defined by channel for failed transactions only |
| token | Alphanumeric with symbols up to 50 chars (optional, with req4token=1) | Card payment only: if PAN has been tokenized |
| ccbrand | optional, with req4token=1 | Card payment only: Visa, MasterCard, AMEX |
| cclast4 | optional, 4-digit numeric, with req4token=1 | Card payment only: Last 4-digit of PAN |
| cctype | optional, with req4token=1 | Card payment only: Credit, Debit, Prepaid |
| ProcessorResponseCode | alphanumeric | Authorization response code |
| ProcessorCVVResponse | alpha | Credit Card validation response code |
| SchemeTransactionID | alphanumeric | Transaction ID provided by CC Schemes. |
| MerchantAdviceCode | numeric | MasterCard issuers use the Merchant Advice Code (MAC) in authorization request responses to communicate with merchants about a cardholder's account |
| ECI | numeric | Electronic Commerce Indicator (ECI) is a value returned by Directory Servers (namely Visa, MasterCard, MyDebit, JCB, and American Express) indicating the outcome of authentication attempted on transactions enforced by 3DS |
| 3DSVersion | alphanumeric | Version of the 3DS use to authenticate the transaction |
| ACSTransactionID | alphanumeric | ACS transaction identifier |
| 3DSTransactionID | alphanumeric | 3DS transactions identifier |
| TerminalID | alphanumeric | Terminal ID of the transaction |
| DbtrAgt | alphanumeric, optional, with req4duitnow=1 | Debtor BIC code |

| | | |
|---------------|---|-------------------------|
| DbtrAcct_Type | alphanumeric, optional, with req4duitnow=1 | Debtor account type |
| TxnType | alphanumeric, optional, with req4duitnow=1 | Debtor transaction type |
| Channel | Alphanumerics, optional with fields=channel | Payment via Channel |

Formula of skew

```
skew =md5( {oid}{domain}{verify_key} )
```

Example of response

| type=0, plain text output, newline with single or two TAB character(s) | <table><tr><th>TranID</th><th>BillingDate</th><th>StatCode</th><th>StatName</th><th>Amount</th><th>BillingName</th><th>Currency</th><th>ErrorCode</th><th>ErrorDesc</th></tr><tr><td>418607</td><td>2009-11-26</td><td>22</td><td>pending</td><td>25.00</td><td>Lenka</td><td>MYR</td><td></td><td></td></tr><tr><td>418603</td><td>2009-11-26</td><td>00</td><td>captured</td><td>125.10</td><td>Mika</td><td>MYR</td><td></td><td></td></tr><tr><td>418583</td><td>2009-11-26</td><td>00</td><td>captured</td><td>71.10</td><td>Ciara</td><td>MYR</td><td></td><td></td></tr></table> | TranID | BillingDate | StatCode | StatName | Amount | BillingName | Currency | ErrorCode | ErrorDesc | 418607 | 2009-11-26 | 22 | pending | 25.00 | Lenka | MYR | | | 418603 | 2009-11-26 | 00 | captured | 125.10 | Mika | MYR | | | 418583 | 2009-11-26 | 00 | captured | 71.10 | Ciara | MYR | | |
|--|---|----------|-------------|----------|-------------|----------|-------------|-----------|-----------|-----------|--------|------------|----|---------|-------|-------|-----|--|--|--------|------------|----|----------|--------|------|-----|--|--|--------|------------|----|----------|-------|-------|-----|--|--|
| TranID | BillingDate | StatCode | StatName | Amount | BillingName | Currency | ErrorCode | ErrorDesc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 418607 | 2009-11-26 | 22 | pending | 25.00 | Lenka | MYR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 418603 | 2009-11-26 | 00 | captured | 125.10 | Mika | MYR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 418583 | 2009-11-26 | 00 | captured | 71.10 | Ciara | MYR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| type=1, format=0, POST variables with delimiter " " | <pre>\$_POST[TranID] = "418607 418603 418583"; \$_POST[BillingDate] = "2009-11-26 2009-11-26 2009-11-26"; \$_POST[StatCode] = "22 00 00"; \$_POST[StatName] = "pending captured captured"; \$_POST[Amount] = "25.00 125.10 71.10"; \$_POST[BillingName] = "Lenka Mika Ciara"; \$_POST[Currency] = "MYR MYR MYR"; \$_POST[ErrorCode] = ""; \$_POST[ErrorDesc] = "";</pre> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| type=1, format=1, POST variables in array | <pre>\$_POST[0][TranID] = "418607"; \$_POST[0][BillingDate] = "2009-11-26"; \$_POST[0][StatCode] = "22"; \$_POST[0][StatName] = "pending"; \$_POST[0][Amount] = "25.00"; \$_POST[0][BillingName] = "Lenka"; \$_POST[0][Currency] = "MYR"; \$_POST[0][ErrorCode] = ""; \$_POST[0][ErrorDesc] = ""; \$_POST[1][TranID] = "418603"; \$_POST[1][BillingDate] = "2009-11-26"; \$_POST[1][StatCode] = "00"; \$_POST[1][StatName] = "captured"; \$_POST[1][Amount] = "125.10"; \$_POST[1][BillingName] = "Mika"; \$_POST[1][Currency] = "MYR"; \$_POST[1][ErrorCode] = ""; \$_POST[1][ErrorDesc] = ""; \$_POST[2][TranID] = "418583"; \$_POST[2][BillingDate] = "2009-11-26"; \$_POST[2][StatCode] = "00"; \$_POST[2][StatName] = "captured"; \$_POST[2][Amount] = "71.10"; \$_POST[2][BillingName] = "Ciara"; \$_POST[2][Currency] = "MYR"; \$_POST[2][ErrorCode] = ""; \$_POST[2][ErrorDesc] = "";</pre> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|-----------------------------|---|
| type=2, JSON text output | <pre>[{ "TranID": "418607", "BillingDate": "2009-11-26", "StatCode": "22", "StatName": "pending", "Amount": "25.00", "BillingName": "Lenka", "Currency": "MYR", "ErrorCode": "", "ErrorDesc": "" }, { "TranID": "418603", "BillingDate": "2009-11-26", "StatCode": "00", "StatName": "captured", "Amount": "125.10", "BillingName": "Mika", "Currency": "MYR", "ErrorCode": "", "ErrorDesc": "" }, { "TranID": "418583", "BillingDate": "2009-11-26", "StatCode": "00", "StatName": "captured", "Amount": "71.10", "BillingName": "Ciara", "Currency": "MYR", "ErrorCode": "", "ErrorDesc": "" }]</pre> |
|-----------------------------|---|

4. Query by multiple order ID (batch output)

Request

URL: https://api.fiuu.com/RMS/query/q_by_oids.php

Method: POST or GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|----------------------------------|---|
| oids | alphanumeric, up to 100 orders | Merchant order ID, must be URLencoded. |
| delimiter | single character, default is " " | Avoid using any symbol that might exist in order ID, and also any of these: ", %, *, <, >, ?, \, \$, &, = |
| domain | alphanumeric, max 32 chars | Merchant ID in PG system. |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string. |
| url | optional, URL for POST response | The URL to receive POST response from PG |
| type | optional, 1-digit integer | 0 = plain text result (default) 1 = result via POST method |

| | | |
|--------------|--|---|
| | | 2 = JSON text result |
| format | optional, 1-digit integer, apply for type=1 only | result string with TAB-newline (default) 0 = result string with delimiter () 1 = result in array |
| req4token | optional, 1-digit integer | 0 = No (default) 1 = Yes for more card related information |
| req4terminal | optional, 1-digit integer | 0 = No (default) 1 = Yes to return TerminalID |
| req4duitnow | optional, 1-digit integer | 0 = No (default) 1 = Yes to return DuitNow extra information |

Response

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|---|--|
| OrderID | alphanumeric, max 40 chars | Merchant order ID for tracking purpose. |
| TranID | integer, max 20 digits | Unique transaction ID for tracking purpose. |
| BillingDate | date (YYYY-MM-DD HH:mm:ss) | Transaction date |
| StatCode | string of 2-digit numeric | 00 = Success 11 = Failure 22 = Pending |
| StatName | alphanumeric | Success: captured, settled, authorized Failure: failed, cancelled, chargeback, release, reject/hold, blocked, ReqCancel, ReqChargeback Pending: Pending, Unknown |
| Amount | 2 decimal points numeric value | The payment amount |
| BillingName | alphanumeric, max 128 chars | Buyer full name |
| VrfKey | 32 chars hexadecimal string | This is the data integrity protection hash string. |
| Channel | alphanumeric, max 100 chars | Payment via channel |
| Currency | 3 chars ISO-4217 currency code | The payment currency. E.g. MYR, USD, EUR, AUD, SGD, CNY, IDR |
| ErrorCode | alphanumeric | Error code defined by channel for failed transactions only |
| ErrorDesc | alphanumeric | Error description defined by channel for failed transactions only |
| token | Alphanumeric with symbols up to 50 chars (optional, with req4token=1) | Card payment only: if PAN has been tokenized |
| ccbrand | optional, with req4token=1 | Card payment only: Visa, MasterCard, AMEX |
| cclast4 | optional, 4-digit numeric, with req4token=1 | Card payment only: Last 4-digit of PAN |
| cctype | optional, with req4token=1 | Card payment only: Credit, Debit, Prepaid |

| | | |
|-----------------------|--|---|
| ProcessorResponseCode | alphanumeric | Authorization response code |
| ProcessorCvVResponse | alpha | Credit Card validation response code |
| SchemeTransactionID | alphanumeric | Transaction ID provided by CC Schemes. |
| MerchantAdviceCode | numeric | MasterCard issuers use the Merchant Advice Code (MAC) in authorization request responses to communicate with merchants about a cardholder's account |
| ECI | numeric | Electronic Commerce Indicator (ECI) is a value returned by Directory Servers (namely Visa, MasterCard, MyDebit, JCB, and American Express) indicating the outcome of authentication attempted on transactions enforced by 3DS |
| 3DSVersion | alphanumeric | Version of the 3DS use to authenticate the transaction |
| ACSTransactionID | alphanumeric | ACS transaction identifier |
| 3DSTransactionID | alphanumeric | 3DS transactions identifier |
| TerminalID | alphanumeric | Terminal ID of the transaction |
| DbtrAgt | alphanumeric, optional, with req4duitnow=1 | Debtor BIC code |
| DbtrAcct_Type | alphanumeric, optional, with req4duitnow=1 | Debtor account type |
| TxnType | alphanumeric, optional, with req4duitnow=1 | Debtor transaction type |

Formula of skey and VrfKey

`skey =md5({domain}{oIDS}{verify_key})`
`VrfKey=md5({Amount}{secret_key}{Domain}{OrderID}{StatCode})`

- See the example in next page -

Example of response

| | |
|----------------------------------|---|
| type=1 format=1 | <pre> [oid1] => Array ([TranID] => 9994238 [BillingDate] => 2016-11-28 16:32:08 [StatCode] => 00 [StatName] => captured [Amount] => 30.00 [BillingName] => kimyoon [VrfKey] => 311d72c16e0d3b3fc7994ae93467a2d9 [Channel] => mb2u [Currency] => MYR [ErrorCode] => [ErrorDesc] =>) [oid2] => Array ([TranID] => 10004613 [BillingDate] => 2016-11-29 09:56:02 [StatCode] => 11 [StatName] => failed [Amount] => 58.60 [BillingName] => MohdAli [VrfKey] => f9f06b47e23410e624df5e272accb27dc [Channel] => fpx [Currency] => MYR [ErrorCode] => [ErrorDesc] =>) ... [oidN] => Array ([TranID] => - [BillingDate] => - [StatCode] => - [StatName] => - [Amount] => - [BillingName] => - [VrfKey] => - [Channel] => - [Currency] => - [ErrorCode] => - [ErrorDesc] => -) </pre> |
| type=1 format=0 delimiter= | <pre> [OrderID] => oid1 oid2 ... oidN [TranID] => 9994238 10004613 ... - [BillingDate] => 2016-11-28 16:32:08 2016-11-29 09:56:02 ... - [StatCode] => 00 11 ... - [StatName] => captured failed ... - [Amount] => 30.00 58.60 ... - [BillingName] => Nurbaizura KUMARASAN ... - [VrfKey] => 311d72c16e0d3b3fc7994ae93467a2d9 f9f06b47e23410e624df5e272accb27dc ... - [Channel] => mb2u fpx ... - [Currency] => MYR MYR ... - [ErrorCode] => ... - [ErrorDesc] => ... - </pre> |
| type=2 | <pre> [{ "OrderID": "oid1", "TranID": "9994238", </pre> |

| | |
|--|--|
| | <pre> "BillingDate": "2016-11-28 16:32:08", "StatCode": "00", "StatName": "captured", "Amount": 30.00, "BillingName": "Nurbaizura", "VrfKey": "311d72c16e0d3b3fc7994ae93467a2d9", "Channel": "mb2u", "Currency": "MYR", "ErrorCode": null, "ErrorDesc": null }, { "OrderID": "oid2", "TranID": "10004613", "BillingDate": "2016-11-29 09:56:02", "StatCode": "11", "StatName": "failed", "Amount": 58.60, "BillingName": "KUMARASAN", "VrfKey": "f9f06b47e23410e624df5e272accb27dc", "Channel": "fpx", "Currency": "MYR", "ErrorCode": null, "ErrorDesc": null }, ... { "OrderID": "oidN", "TranID": "-", "BillingDate": "-", "StatCode": "-", "StatName": "-", "Amount": "-", "BillingName": "-", "VrfKey": "-", "Channel": "-", "Currency": "-", "ErrorCode": "-", "ErrorDesc": "-" }] </pre> |
|--|--|

5. Query by multiple transaction ID (batch output)

Request

URL: https://api.fiuu.com/RMS/query/q_by_tids.php

Method: POST or GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--|---|
| tIDs | concatenated transaction ID with " " up to 100 items | A group of transaction ID, must be URLEncoded |
| domain | alphanumeric, max 32 chars | Merchant ID in PG system |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string |
| url | optional, URL for POST response | The URL to receive POST response from PG |
| type | optional, 1-digit integer | 0 = plain text result (default) 1 = result via POST method |
| format | optional, 1-digit integer, apply for type=1 only | 0 = result string with delimiter () 1 = result in array |
| req4token | optional, 1-digit integer | 0 = No (default) 1 = Yes for more card related information |
| req4terminal | optional, 1-digit integer | 0 = No (default) 1 = Yes to return TerminalID |
| req4duitnow | optional, 1-digit integer | 0 = No (default) 1 = Yes to return DuitNow extra information |
| fields | optional, predefined string | channel = return Payment via Channel |

Response

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------------|--|
| TranID | integer, max 20 digits | Unique transaction ID for tracking purpose. |
| Amount | 2 decimal points numeric value | The payment amount |
| BillingDate | date (YYYY-MM-DD HH:mm:ss) | Transaction date |
| BillingName | alphanumeric, 128 chars | Buyer full name |
| VrfKey | 32 chars hexadecimal string | This is the data integrity protection hash string. |
| StatCode | string of 2-digit numeric | 00 = Success 11 = Failure 22 = Pending |
| StatName | alphanumeric | Success: captured, settled, authorized Failure: failed, cancelled, chargeback, release, reject/hold, blocked, ReqCancel, ReqChargeback Pending: Pending, Unknown |
| OrderID | alphanumeric, 40 chars | Merchant order ID for tracking purpose. |

| | | |
|-----------------------|---|---|
| Currency | 3 chars ISO-4217 currency code | The payment currency. E.g. MYR, USD, EUR, AUD, SGD, CNY, IDR |
| ErrorCode | alphanumeric | Error code defined by channel for failed transactions only |
| ErrorDesc | alphanumeric | Error description defined by channel for failed transactions only |
| token | Alphanumeric with symbols up to 50 chars (optional, with req4token=1) | Card payment only: if PAN has been tokenized |
| ccbrand | optional, with req4token=1 | Card payment only: Visa, MasterCard, AMEX |
| cclast4 | optional, 4-digit numeric, with req4token=1 | Card payment only: Last 4-digit of PAN |
| cctype | optional, with req4token=1 | Card payment only: Credit, Debit, Prepaid |
| ProcessorResponseCode | alphanumeric | Authorization response code |
| ProcessorCvVResponse | alpha | Credit Card validation response code |
| SchemeTransactionID | alphanumeric | Transaction ID provided by CC Schemes. |
| MerchantAdviceCode | numeric | MasterCard issuers use the Merchant Advice Code (MAC) in authorization request responses to communicate with merchants about a cardholder's account |
| ECI | numeric | Electronic Commerce Indicator (ECI) is a value returned by Directory Servers (namely Visa, MasterCard, MyDebit, JCB, and American Express) indicating the outcome of authentication attempted on transactions enforced by 3DS |
| 3DSVersion | alphanumeric | Version of the 3DS use to authenticate the transaction |
| ACSTransactionID | alphanumeric | ACS transaction identifier |
| 3DSTransactionID | alphanumeric | 3DS transactions identifier |
| TerminalID | alphanumeric | Terminal ID of the transaction |
| DbtrAgt | Alphanumeric, optional, with req4duitnow=1 | Debtor BIC code |
| DbtrAcct_Type | Alphanumeric, optional, with req4duitnow=1 | Debtor account type |
| TxnType | Alphanumeric, optional, with req4duitnow=1 | Debtor transaction type |
| Channel | Alphanumeric, optional with fields=channel | Payment via Channel |

Formula of skey and VrfKey

skey =md5({domain}{tIDS}{**verify_key**})

VrfKey=md5({Amount}{**secret_key**}{Domain}{TranID}{StatCode})

Daily Transaction Report (Reconciliation)

PG Daily Transaction Report provides merchant end-of-day (EoD) reconciliation or to verify all transactions for a specific date.

Request

URL: <https://api.fiuu.com/RMS/API/PSQ/psq-daily.php>

Method: POST or GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|---|---|---|
| merchantID | alphanumeric, 32 chars | Merchant ID in PG system. |
| skkey | 32 chars hexadecimal string | This is the data integrity protection hash string. |
| rdate | date (YYYY-MM-DD) or date(YYYY-MM-DD HH:ii:ss) | The date or beginning time of transactions to query 2020-10-10 or 2020-10-10 07:11:24 |
| rduration | optional, second in numeric | Without rduration, the search duration is 24 hours or 86400 seconds starting from rdate |
| status | optional, alphanumeric, 32 chars | 00 - success 11 - failed 22 - pending Combine with delimiter " " for multiple status or left empty for all status. |
| version | version | 2.0, 3.0, or latest is 4.0 |
| additional_fields [New from Version 2] | optional, predefined tags | BillingEmail - billing email TransactionRate - transaction rate BillingInfo - billing info TransactionCost - transaction cost Channel - channel BillingMobileNumber - billing mobile TransactionFee - transaction fee GST - GST (tax) NetAmount - net amount IPAddress - IP address BankName - bank name BIN - card no (hidden) ExpiryDate - card expiry date StatusDescription - status description SettlementDate - settlement date PaidDate - paid date TerminalID - terminal ID PayTransactionID - transaction ID BuyerName - buyer name CaptureRefID - Capture Reference ID (Only in v3) RefundRefID - Refund Reference ID (Only in v3) AcquirerName - Acquiring bank or processor name (For gateway solution merchant only) CardScheme - Card brand (VISA, MASTERCARD) CardType - Card type (GOLD, PLATINUM) CardCountry - Country name from the user's card all - for all additional fields Combine with delimiter "," for multiple fields |

| | | |
|---------------------------------------|----------|--|
| response_type [New from Version 2] | optional | Response format in either text/json/csv(only in v2 and v3) |
| page | optional | The total page number with 5000 records per page |

Formula of skey

skey =md5({rdate}{merchantID}{secret_key})

Response

(plain text with newline & TAB characters)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|--|---------------------------------|---|
| BillingDate | date/time (YYYY-MM-DD HH:mm:ss) | Transaction date/time |
| OrderID | alphanumeric, 40 chars | Invoice or order number from merchant system. |
| TranID | integer, 20 digits | Unique transaction ID for tracking purpose. |
| Channel | Predefined string in PG system | Channel references for the merchant system. |
| Amount | 2 decimal points numeric value | The payment amount |
| StatCode | string of 2-digit numeric | 00 = Success 11 = Failure 22 = Pending |
| StatName | word | Success: captured, settled, authorized Failure: failed, cancelled, chargeback, release, reject/hold, blocked, ReqCancel, ReqChargeback Pending: Pending, Unknown |
| BillingName | alphanumeric, 128 chars | Buyer full name |
| Serviceltem | text | Billing Information / Description (newline will be replaced by whitespace) |
| Additional fields: BillingEmail TransactionRate TransactionCost BillingMobileNumber TransactionFee GST NetAmount IPAddress BankName ExpiryDate StatusDescription SettlementDate PaidDate TerminalID PayTransactionID BuyerName | text (default) or JSON string | BillingEmail = ABC@razer.com TransactionRate = 0.0290 TransactionCost = 0.0000 BillingMobileNumber = 0123456789 TransactionFee = 100.0 GST = 0 NetAmount = 1900.0 IPAddress = 192.168.0.1 BankName = unknownbank ExpiryDate = 2020 StatusDescription = This is status description SettlementDate = 2020-05-26 10:51:51 PaidDate = 2020-05-31 10:51:51 TerminalID = 999 |

Settlement Report (Reconciliation)

PG Settlement Report provides merchants the fund transfer or balance clearance and settlement reconciliation for a specific date.

Version 1.0, 2.0 and 3.0 will be obsoleted and the following is the latest specification of version 4.0, 5.0 and 6.0. Version 4.0, 5.0 and 6.0 will include refund and chargeback records that are excluded from the settlement batch. Version 5.0 supports pagination for big merchants.

Request

URL: <https://api.fiuu.com/RMS/API/settlement/report.php>

Method: GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|---|---|
| version | Integer, Default value is 1.0. | Indicate version of the API. Current version is 6.0. If not specified, version 1.0 will be used. |
| merchant_id | alphanumeric, 32 chars | Merchant ID in PG system |
| token | 32 chars hexadecimal string | This is the data integrity protection hash string |
| date | date (YYYY-MM-DD) | The date of settlement to query |
| format | json, xml, csv | Recommend to use csv for large file |
| download | optional, set to "y" for download mode | Download option is only available for CSV format |
| page | Integer, mandatory for version 5.0 | Determines the page to view for D records that have a limit of 5000 transactions. Currently available to version 5.0. |
| page_txn | Optional, integer. Default value is 5000. | Determines the number of items being generated in a page. Currently available on version 5.0. |

Formula of token

token =md5({merchantID}{**verify_key**}{date})

Response

| Value | Type Format / Max Length | Description / Example |
|---------------------|-----------------------------------|---|
| RecordIdentifier | 1 character | H: Header |
| SettlementCurrency | 3 chars ISO-4217 currency code | Default is MYR, Settlement currency |
| SettlementNetAmount | numeric without decimal and comma | total settlement amount, 5331674 is equal to 53,316.74 in that currency |

| | | |
|----------------------------|-----------------------------------|--|
| SettlementCommissionAmount | numeric without decimal and comma | total settlement fees, sum of the transfer fees and 3rd party costs |
| NumberOfTransactions | numeric | total transaction number of settled transaction or D data type in the report, not including R & G type |
| BatchReferenceNumber | alphanumeric | Reference number of this settlement |
| SettlementDate | YYYYMMDD | The settlement date |
| SettlementGSTAmount | numeric without decimal and comma | Sum of settled transactions GST amount |
| BankAccount | alphanumeric | Bank swift code and bank account number |
| RefundNetAmount | numeric without decimal and comma | Sum of the refund fees |
| RefundGSTAmount | numeric without decimal and comma | Taxes : GST/VAT on the RefundNetAmount |

| Variable / Parameter | Type Format / Max Length | Description / Example |
|-----------------------------|-----------------------------------|--|
| RecordIdentifier | 1 character | D: Data or the content R: Refund / Chargeback Data G: Data (Original txn data - Txn fully refunded before settlement) |
| MerchantId | alphanumeric | Merchant ID in PG system |
| OrderId | alphanumeric | Order references for merchant system |
| Channel | alphanumeric | Payment channel / method |
| AcquirerReference | alphanumeric | PG transaction ID |
| RefundID | n{1..11} | Refund ID provided by PG |
| MerchantRefID | ans{1..100} | Unique refund tracking/reference ID by merchant |
| RefundFees | numeric without decimal and comma | PG refund fees. D: Always Zero '0' value R: PG refund fees (positive value) |
| TransactionNetAmount | numeric without decimal and comma | D: amount after deducting MDR/fees. Formula: TransactionGrossAmount - TransactionCommissionAmount R: amount refunded to the buyer (full/partial) after adding Refund fees. Formula: TransactionGrossAmount + RefundFees |
| TransactionCommissionAmount | numeric without decimal and comma | The MDR or transaction fee or commission D: MDR R: Recalculate MDR for partial refund during captured and charging model have %. Otherwise the value is 0. |
| TransactionDate | YYYYMMDD | The date of transaction been created |
| TransactionTime | HHmmss | The time of transaction been requested/created |
| TransactionGrossAmount | numeric without decimal and comma | D: Payment amount |

| | | |
|---|---|--|
| | | R: amount refunded to the buyer (full/partial) |
| TransactionCurrency | 3 chars ISO-4217 currency code | The currency sent in by merchant or most of the time, paid by the buyer |
| TransactionGST | numeric without decimal and comma | Taxes : GST/VAT/WHT/EWT |
| TransactionGatewayFee | numeric without decimal and comma | Gateway fee |
| TransactionGatewayFeeCurrency | 3 chars ISO-4217 currency code | MYR, SGD, USD, ... |
| SettlementNetAmountInProcessingCurrency | numeric without decimal and comma | D: TransactionNetAmount after deducting GST. Formula: TransactionGrossAmount - TransactionCommissionAmount - TransactionGST R: TransactionNetAmount after deducting GST. Formula: NEGATIVE (TransactionGrossAmount + RefundFees + TransactionGST - TransactionCommissionAmount) |
| SettlementNetAmount | numeric without decimal and comma | Net amount in settlement currency, after forex conversion (round to 2 decimal place). Formula: SettlementNetAmountInProcessingCurrency*Forex |
| SettlementCurrency | 3 chars ISO-4217 currency code | MYR, SGD, USD, ... |
| Forex | numeric without 8 digit decimal and comma | Forex rate for multi currency transactions. Eg: 1.00000000 = 100000000 |
| Status | alphanumeric | The transaction status. Usually SETTLED for D, REFUND for R, CANCELLED for G |

| Variable / Parameter | Type Format / Max Length | Description / Example |
|--------------------------------|--------------------------|---|
| RecordIdentifier | 1 character | F: Record summary |
| NumberOfTransactionsTotal | integer | Total number of D records |
| NumberOfTransactionsShown | integer | Total number of D records been display |
| FilterTransactionsTotalPages | integer | Total available pages for D records |
| FilterTransactionsLimitPerPage | integer | Limit record been display for D records |

***Note: F row only available in version 5.0 and when page value is more than 0. To speed up the response on the subsequence pages, row R & G will be excluded and may only appear at page 1.**

Error (always in JSON format)

| Variable / Parameter | Description / Example |
|----------------------|-----------------------|
|----------------------|-----------------------|

| | |
|---------|-------------------------------------|
| success | false |
| token | invalid token |
| date | invalid date format, eg. yyyy-mm-dd |

Example (in JSON format)

The following example might not be accurate and please only take it as a format reference

```
[
  {
    "RecordIdentifier": "H",
    "SettlementCurrency": "MYR",
    "SettlementNetAmount": "1033293",
    "SettlementCommissionAmount": "2439",
    "NumberOfTransactions": 15,
    "BatchReferenceNumber": "20170817-613",
    "SettlementDate": "20170817",
    "SettlementGSTAmount": "2239",
    "BankAccount": "(MALAYAN BANKING BHD) MerchantID SDN BHD 5144 8457 3110",
    "RefundNetAmount": "179741",
    "RefundGSTAmount": "334"
  },
  {
    "RecordIdentifier": "D",
    "MerchantId": "merchantIDSB",
    "OrderId": "OP-02559",
    "Channel": "maybank2u",
    "AcquirerReference": "18300981",
    "RefundFees": "0",
    "TransactionNetAmount": "9732",
    "TransactionCommissionAmount": "178",
    "TransactionDate": "20170807",
    "TransactionTime": "112250",
    "TransactionGrossAmount": "9900",
    "TransactionCurrency": "MYR",
    "TransactionGST": "010",
    "SettlementNetAmountInProcessingCurrency": "9722",
    "SettlementNetAmount": "000",
    "SettlementCurrency": "MYR",
    "Forex": null,
    "Status": "SETTLED"
  },
  {
    "RecordIdentifier": "D",
    "MerchantId": "merchantIDSB",
    "OrderId": "163138",
    "Channel": "credit",
    "AcquirerReference": "18310736",
    "RefundFees": "0",
    "TransactionNetAmount": "294521",
    "TransactionCommissionAmount": "9656",
    "TransactionDate": "20170807",
    "TransactionTime": "133001",
    "TransactionGrossAmount": "303630",
    "TransactionCurrency": "MYR",
    "TransactionGST": "547",
    "SettlementNetAmountInProcessingCurrency": "293974",
    "SettlementNetAmount": "000",
    "SettlementCurrency": "MYR",
    "Forex": null,
    "Status": "SETTLED"
  },

```

... segment removed ...

```

{
  "RecordIdentifier": "D",
  "MerchantId": "merchantIDSB",
  "OrderId": "79126387162378123",
  "Channel": "credit",
  "AcquirerReference": "18516590",
  "RefundFees": "0",
  "TransactionNetAmount": "153745",
  "TransactionCommissionAmount": "5040",
  "TransactionDate": "20170810",
  "TransactionTime": "120057",
  "TransactionGrossAmount": "158500",
  "TransactionCurrency": "MYR",
  "TransactionGST": "285",
  "SettlementNetAmountInProcessingCurrency": "153460",
  "SettlementNetAmount": "000",
  "SettlementCurrency": "MYR",
  "Forex": null,
  "Status": "SETTLED"
},
{
  "RecordIdentifier": "D",
  "MerchantId": "merchantIDSB",
  "OrderId": "31283671293",
  "Channel": "credit",
  "AcquirerReference": "18532262",
  "RefundFees": "0",
  "TransactionNetAmount": "9700",
  "TransactionCommissionAmount": "318",
  "TransactionDate": "20170810",
  "TransactionTime": "155958",
  "TransactionGrossAmount": "10000",
  "TransactionCurrency": "MYR",
  "TransactionGST": "018",
  "SettlementNetAmountInProcessingCurrency": "9682",
  "SettlementNetAmount": "000",
  "SettlementCurrency": "MYR",
  "Forex": null,
  "Status": "SETTLED"
},
{
  "RecordIdentifier": "R",
  "MerchantId": "merchantIDSB",
  "OrderId": "54671293761293",
  "Channel": "credit",
  "AcquirerReference": "13251784",
  "RefundFees": 0,
  "TransactionNetAmount": "-179741",
  "TransactionCommissionAmount": "000",
  "TransactionDate": "20170503",
  "TransactionTime": "155958",
  "TransactionGrossAmount": "-185300",
  "TransactionCurrency": "MYR",
  "TransactionGST": "-018",
  "SettlementNetAmountInProcessingCurrency": "-179741",
  "SettlementNetAmount": "000",
  "SettlementCurrency": "MYR",
  "Forex": null,
  "Status": "REFUND"
}

```

1

Unsettled/Refunded Transaction Report (Exclusion from settlement)

Any unsettled transaction that has been canceled within a given settlement batch will be retrievable using this API

Request

URL: https://api.fiuu.com/RMS/API/settlement/report_refund.php

Method: GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|-----------------------------|---|
| merchant_id | alphanumeric, 32 chars | Merchant ID in PG system |
| token | 32 chars hexadecimal string | This is the data integrity protection hash string |
| date | date (YYYY-MM-DD) | The date of settlement to query |
| format | json, xml, csv | |
| download | optional, set to "y" if | Download option is only available for CSV format |

Formula of token

token =md5({merchantID}{verify_key}{date})

Response

| Value | Type Format / Max Length | Description / Example |
|---------------------------------|-----------------------------------|--|
| H | 1 character | Header |
| Settlement currency | 3 chars ISO-4217 currency code | Default is MYR |
| total settlement amount | numeric without decimal and comma | 5331674 is equal to 53,316.74 in that currency |
| total settlement fees | numeric without decimal and comma | Sum of the transfer fees and 3rd party costs |
| total refund transaction number | numeric | Total number of refund transactions |
| batch reference number | alphanumeric | Reference number of this settlement |
| date | YYYYMMDD | The settlement date |
| bank account | alphanumeric | Bank swift code and bank account number |
| Start date | YYYY-MM-DD | The settlement period start date |
| End date | YYYY-MM-DD | The settlement period end date |

| Variable / Parameter | Type Format / Max Length | Description / Example |
|-------------------------------|-----------------------------------|---|
| R | 1 character | Refund Data |
| merchant ID | alphanumeric | Merchant ID in PG system |
| Order ID | alphanumeric | Order references for merchant system |
| Channel / transaction ID | alpha-numeric / numeric | Payment channel / PG transaction ID |
| Transaction net amount | Numeric without decimal and comma | This should equal the original transaction amount minus the fee or commission |
| Transaction commission amount | Numeric without decimal and comma | The MDR or transaction fee or commission |
| Forex Rate | 0 | 0 |
| Settlement amount | 0 | 0 |
| Settlement currency | 0 | 0 |
| Transaction date | YYMMDD | The date of settlement |
| Transaction gross amount | Numeric without decimal and comma | Original transaction amount |
| Transaction currency | 3 chars ISO-4217 currency code | Default is MYR |
| Status | alpha-numeric | The transaction status. Usually REFUND |

Error (always in JSON format)

| Variable / Parameter | Description / Example |
|----------------------|-------------------------------------|
| success | false |
| token | invalid token |
| date | invalid date format, eg. yyyy-mm-dd |

Capture Request (For pre-auth or authorized transaction)

Merchant should use SALES (SALS) for most of the use cases and avoid Pre-Authorization & Capture model. This is because many merchant will miss the auto-release period before they can actually capture the funds. Merchant who uses preauth or authorize payment mode may capture the transaction at a later stage by using this API

Request

URL: <https://api.fiuu.com/RMS/API/capstxn/index.php>

Method: POST or GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------------|--|
| domain | alphanumeric, 32 chars | Merchant ID in PG system |
| tranID | integer, 20 digits | Unique PG transaction ID |
| amount | 2 decimal points numeric value | The total amount paid or to be paid |
| RefID | Alphanumeric, 100 chars | Reference ID for tracking purpose sent by merchant |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string |

Response (JSON Format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|-----------------------------|--|
| TranID | integer, 20 digits | Unique transaction ID for tracking purposes |
| Domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| VrfKey | 32 chars hexadecimal string | This is the data integrity protection hash string |
| StatCode | string of 2-digit numeric | 00 = Success 11 = Failure 12 = Invalid or unmatched security hash string 13 = Not a credit card transaction 15 = Requested day is on settlement day 16 = Forbidden transaction 17 = Transaction not found 18 = Missing required parameter 19 = Domain not found 20 = Temporary out of service 21 = Authorization expired 23 = Not allowed to perform partial capture 24 = Transaction has already been captured. 25 = Amount requested more than available capture amount 99 = General Error(Please check with PG Support) |
| StatDate | date (YYYY-MM-DD) | Response date & time |
| PartialCaptureTranID | integer, 20 digits | Created upon successful partial capture request |

Formula of skey & VrfKey

```
skey =md5( {txnID}{amount}{domain}{verify_key} )  
VrfKey=md5( {secret_key}{Domain}{TranID}{StatCode} )
```

Reversal Request

Merchant can request a reversal of transaction via original payment method for an “authorized” card, and “captured” card (including recurring payment), M2U, CIMB Clicks, Hong Leong Connect, Razer Pay, Alipay-Spot, POS Terminal, Boost and WeChat Pay payment.

For most of the payment channels above, the transaction can be “void” immediately on the same day before settlement (card payment at around 10pm and other channels are 11:59pm local time). For a payment channel that accepts refund requests, the transaction that happens within 180 days will be refunded within 7-14 days after the request is sent.

Please note that this API is to send a refund request, but not getting the status of the refund process. All successful requests shall be executed and if there is any exceptional case, PG support team will contact the merchant to resolve the issue.

Request

URL: <https://api.fiuu.com/RMS/API/refundAPI/refund.php>

Method: POST or GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|---------------------------------|---|
| txnID | integer, 20 digits | Unique transaction ID for tracking purpose. |
| domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string. |
| url | optional, URL for POST response | The URL to receive POST response from PG |
| type | optional, 1-digit integer | 0 = plain text result (default) 1 = result via POST method |

Response

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|-----------------------------|--|
| TranID | integer, 20 digits | Echo of the <i>txnID</i> in request |
| Domain | alphanumeric, 32 chars | Echo of the <i>domain</i> in request |
| VrfKey | 32 chars hexadecimal string | This is the data integrity protection hash string. |
| StatCode | string of 2-digit numeric | 00 = Success (will proceed the request) 11 = Failure 12 = Invalid or unmatched security hash string 13 = Not a refundable transaction 14 = Transaction date more than 180 days 15 = Requested day is on settlement day 16 = Forbidden transaction 17 = Transaction not found 18 = Duplicate partial refund request |

| | | |
|----------|----------------------------|---|
| | | 19 = Merchant not found 20 = Missing required parameter 21 = Transaction must be in authorized/captured/settled status 22 = Duplicate request is not allowed |
| StatDate | date (YYYY-MM-DD HH:mm:ss) | Response date & time |
| refundID | integer, 20 digits | Refund ID provided by PG |

Formula of skey & VrfKey

$skey = md5(\{txnID\}\{domain\}\{secret_key\})$
 $VrfKey = md5(\{secret_key\}\{Domain\}\{TranID\}\{StatCode\})$

Reversal Reference Table

| Payment Channel | Support Void / Refund / Both | Cut-off time for VOID request | Processing method | Credit to buyer within |
|---------------------|------------------------------|-------------------------------|-------------------|------------------------|
| MYR card payment | Both | 10pm GMT+8 | manual | 14-business day |
| Maybank2u | Refund | - | manual | 7-business day |
| CIMB Clicks | Refund | - | manual | 7-business day |
| Hong Leong Connect | Refund | - | manual | 7-business day |
| Razer Pay | Both | 11:59pm GMT+8 | auto | 1-business day |
| Alipay Spot | Both | 11:59pm GMT+8 | auto | 1-business day |
| Wechat Pay (CN, MY) | Both | 11:59pm GMT+8 | auto | 1-business day |
| Boost | Both | 11:59pm GMT+8 | auto | 1-business day |
| TnG e-Wallet | Both | 11:59pm GMT+8 | auto | 1-business day |
| Grab Pay | Both | 11:59pm GMT+8 | auto | 1-business day |
| Maybank QR Push | Refund | - | manual | 7-business day |

Advanced Full/Partial Refund

Merchants can request a full/partial refund for a “captured” or “settled” transaction regardless of the payment method. The request can be sent within 180 days from the transaction creation date and the refund process will take about 7-14 days after the request is sent.

Eligible merchants may request for Fiuu “**Refund Portal**” so as to ease their buyers to provide bank account details to shorten the refund lead time.

For payment made via Fiuu Cash, refund will not be applicable. Merchants will need to collect bank account information from the customers and perform wire transfer separately without Fiuu’s involvement.

Request

URL: <https://api.fiuu.com/RMS/API/refundAPI/index.php>

Method: POST or GET

| Field Name | Data Type(Size) | M/O | Description |
|------------------|-----------------|-----|--|
| RefundType | a{1} | M | P - Partial Refund |
| MerchantID | an{1..32} | M | Merchant ID provided by PG |
| RefID | ans{1..100} | M | Unique reference ID for tracking purpose sent by merchant |
| TxnID | n{1..20} | M | PG Transaction ID |
| Amount | n{10,2} | M | eg. '5.00' Amount to be refunded |
| BankCode | an{8} | C | Applicable for Online Banking only. (Refer to predefined bank lists) |
| BankCountry | a{2} | C | Applicable for Online Banking only. Two letters country ISO code. (Default value: MY) |
| BeneficiaryName | as{1..100} | C | Applicable for Online Banking only. |
| BeneficiaryAccNo | ans{1..100} | C | Applicable for Online Banking only. |
| Signature | an{32} | M | This is the data integrity protection hash string. |
| mdr_flag | n{1} | O | This is to include or exclude MDR refund to the buyer if the amount is same as bill amount. Available value is as below: 0 - Include MDR/Full Refund (Default) 1 - Exclude/Reserved MDR |
| notify_url | as | O | This is the URL for merchant to receive refund status (same format as the response of this API), either 00 (Success) or 11 (Rejected) |

Signature = md5({RefundType}{MerchantID}{RefID}{TxnID}{Amount}{secret_key})

Response

PG responds JSON format to merchant upon a successful request (positive result)

| Field Name | Data Type(Size) | M/O | Description |
|------------|-------------------|-----|--|
| RefundType | a{1} | M | Echo of merchant request |
| MerchantID | an{1..32} | M | Echo of merchant request |
| RefID | ans{1..100} | M | Echo of merchant request |
| RefundID | n{1..11} | M | Refund ID provided by PG |
| TxnID | n{1..20} | M | Echo of merchant request |
| Amount | n{10,2} | M | Echo of merchant request |
| Status | a{2} [00, 11, 22] | M | 22 for 'Pending' (Upon Request) 11 for 'Rejected' (via notify_url) 00 for 'Success' (Refunded, via notify_url) |
| Signature | a{32} | M | This is data integrity protection hash string. |
| reason | ans{1..255} | O | Reason for rejected status |
| FPXTxnID | ans{1..100} | O | FPX channel Transaction ID |

Signature = md5({RefundType}{MerchantID}{RefID}{RefundID}{TxnID}{Amount}{Status}{secret_key})

PG will respond the following in JSON format once error occurs (negative result)

| Field Name | Data Type(Size) | Description |
|------------|-----------------|---------------------|
| error_code | an{5} | Refer to Appendix C |
| error_desc | ans{1..255} | Refer to Appendix C |

Partial Refund Status Inquiry by TxnID/RefID

Merchant is able to do a status inquiry for a refund transaction.

Request Type 1

URL: https://api.fiuu.com/RMS/API/refundAPI/q_by_txn.php

Method: POST or GET

| Field Name | Data Type(Size) | M/O | Description |
|------------|-----------------|-----|--|
| TxnID | n{1..20} | M | PG Transaction ID |
| MerchantID | a{1..32} | M | Merchant ID provided by PG |
| Signature | n{1..32} | M | This is the data integrity protection hash string. |

Signature = md5({TxnID}{MerchantID}{verify_key})

Request Type 2

URL: https://api.fiuu.com/RMS/API/refundAPI/q_by_refID.php

Method: POST or GET

| Field Name | Data Type(Size) | M/O | Description |
|------------|-----------------|-----|--|
| RefID | ans{1..100} | M | Unique tracking/references ID from merchant |
| MerchantID | a{1..32} | M | Merchant ID provided by PG |
| Signature | n{1..32} | M | This is the data integrity protection hash string. |

Signature = md5({RefID}{MerchantID}{verify_key})

Response

PG responds JSON format to merchant upon a successful request (positive result)

| Field Name | Data Type(Size) | M/O | Description |
|------------|-----------------|-----|--|
| TxnID | n{1..20} | M | Echo of merchant request |
| RefID | ans{1..100} | M | Unique tracking/references ID from merchant |
| RefundID | n{1..11} | M | Refund ID provided by PG |
| Status | enum | M | 'pending', 'processing', 'rejected', 'success' |
| LastUpdate | ans{1..255} | M | Last update timestamp. |
| FPXTxnID | ans{1..100} | O | FPX channel Transaction ID |

Appendix for Partial Refund and Partial Refund Status Inquiry

Appendix A : Data Type Details

| Code | Description |
|--------|------------------------|
| a | Letters, A-Za-z |
| n | Numbers, 0-9 |
| s | Symbols, .:!?*,!&_- |
| {x} | Fixed length x |
| {y..x} | Length range: y – x |
| {y,x} | Number range: 0-9. 0-9 |

Appendix B : M/O Details

| Code | Description |
|------|--------------------|
| M | Mandatory field. |
| O | Optional field. |
| C | Conditional field. |

Appendix C : Error Code & Description in JSON

| error_code | error_desc |
|------------|---|
| PR001 | Refund Type not found. |
| PR002 | MerchantID field is mandatory. |
| PR003 | RefID field is mandatory. |
| PR004 | TxnID field is mandatory |
| PR005 | Amount field is mandatory. |
| PR006 | Signature field is mandatory |
| PR007 | Merchant ID not found. |
| PR008 | Invalid Signature. |
| PR009 | Txn ID not found. |
| PR010 | Transaction must be in authorized/captured/settled status. Current transaction is in {{TRANSACTION_STATUS}} status. |
| PR011 | Exceed refund amount for this transaction. |
| PR012 | Bank information is not applicable for credit channel transaction. |

| | |
|--------|---|
| PR013 | BankCode not found in our database, please contact support. |
| PR014 | Bank information is mandatory for non-credit channel transaction. |
| PR015 | Server is busy, try again later. |
| PR016 | Duplicate RefID found, please provide a unique RefID. |
| PR017 | Refund request for transaction that is out of the allowed period. |
| PR018 | BeneficiaryName cannot contain non-alphanumeric characters. |
| PR019 | Refund is not allowed / Only partial refund is allowed / Only full refund is allowed. |
| PR020 | Insufficient balance to refund. |
| INQ001 | TxnID field is mandatory. |
| INQ002 | MerchantID field is mandatory. |
| INQ003 | Signature field is mandatory. |
| INQ004 | Merchant ID not found. |
| INQ005 | Invalid Signature. |
| INQ006 | Unable to find refund transaction. |
| INQ011 | RefID field is mandatory. |

Static QR-Code Generator

For merchant to generate static QR code of e-wallet

Request

URL: <https://api.fiuu.com/RMS/API/staticqr/index.php>

Method: POST or GET

| Field Name | Data Type(Size) | M/O | Description |
|------------|-------------------------|-----|---|
| merchantID | Alphanumeric, 32 chars | M | Merchant ID provided by PG |
| channel | Alphanumeric, 32 chars | M | Channel requested: <ul style="list-style-type: none">• AlipaySQR - Alipay Static QR• WeChatPaySQR - WeChat Pay Static QR• DuitNowSQR - DuitNow Static QR• PayNowSQR - PayNow Static QR |
| orderid | Alphanumeric, 40 chars | M | Items ID. E.g: S001 |
| currency | Alphabet, 3 chars | M | ISO-4217 currency code. |
| amount | Numeric | C | The total amount to be paid in one purchase order. 2 decimal points and comma(,) is not allowed. Mandatory except DuitNowSQR and PayNowSQR |
| bill_name | Alphanumeric, 128 chars | M | Items name. |
| bill_desc | Text | M | Item description. |
| checksum | Alphanumeric, 32 chars | M | This is a request integrity protection hash string. |

Checksum = md5({merchantID}{channel}{orderid}{currency}{amount}{verify_key})

Response

PG responds JSON format to merchant upon a successful request

| Field Name | Data Type(Size) | M/O | Description |
|-------------|-----------------|-----|--|
| status | Boolean | M | true/false |
| qrcode_data | URL | M | QR-Code data. Available for status true. |
| qrcode_link | URL | M | Link to view QR-Code image. Available for status true. |
| error_code | Alphanumeric | M | Error code when status is false. |
| error_mesg | Text | M | Error description when status is false. |

| | |
|------------|------------|
| error_code | error_mesg |
|------------|------------|

| | |
|-------|--|
| SQ001 | Missing required parameter (<FieldName>). |
| SQ002 | System is busy now, temporarily out of service. Please try again later. |
| SQ003 | Merchant info not found. |
| SQ005 | Invalid checksum value. |
| SQ004 | Currency not supported. |
| SQ006 | Your account doesn't subscribe to this channel. Please contact our support teams to enable this. |

Channel Status API

This API returns the availability of all channels enabled for a particular merchantID

Request

URL: https://pay.fiuu.com/RMS/API/chkstat/channel_status.php

Method: POST

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| merchantID | Alphanumeric, 32 chars | Merchant ID in PG system. |
| datetime | YYYYMMDDHHmmss | Request date & time, e.g. 20161202153423 |
| skey | Alphanumeric | For merchant access verification purpose |

Response (JSON format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| status | Boolean | true/false |
| result | Object | [...] |
| title | Alphanumeric | Display name of the payment method |
| status | Boolean | True = Bank/Channel is online or available False = Bank/Channel is temporary offline/down for maintenance |
| currency | Object | List of currency accepted by the payment method |
| channel_map | Object | [...] |
| integration_type | Object | Hosted, seamless, seamlesspayment, direct |
| request | Alphanumeric | Channel name submitted during request |
| response | Alphanumeric | Channel name submitted during response |
| logo_url_16x16 | Alphanumeric | Link to channel logo in size 16x16 |
| logo_url_24x24 | Alphanumeric | Link to channel logo in size 24x24 |
| logo_url_32x32 | Alphanumeric | Link to channel logo in size 32x32 |
| logo_url_120x43 | Alphanumeric | Link to channel logo in size 120x43 |
| channel_type | Text | IB - internet banking, CC - credit card, EW - ewallet , OTC - over the counter |
| googlepay_enabled | Boolean | 1 = Google Pay is enabled for this channel 0 = Google Pay is NOT enabled for this channel |

| | | |
|------------------|--------------|--|
| applepay_enabled | Boolean | 1 = Apple Pay is enabled for this channel 0 = Apple Pay is NOT enabled for this channel |
| installment_info | Alphanumeric | Display list of installment plan available |

Formula of skew

```
skew = HMAC_SHA256( {datetime}{merchantID}, {verify_key} )
```

Example (in JSON format)

The following example might not be accurate and please only take it as a format reference

```
{
  "status": true,
  "result": {
    {
      "title": "Affin Online",
      "status": 1,
      "currency": {
        "MYR",
        "USD",
      },
      "channel_map": {
        "hosted": {
          "request": "affin-epg",
          "response": "affin-epg"
        },
        "seamless": {
          "request": "affinonline",
          "response": "affin-epg"
        },
        "old_direct": {
          "request": "affin-epg",
          "response": "affin-epg"
        },
        "direct": {
          "request": "AFFIN-EPG",
          "response": "AFFIN-EPG"
        }
      },
      "logo_url_16x16": "https://d2x73ruoixi2ei.cloudfront.net/images/logos/channels/24/affin.gif",
      "logo_url_24x24": "https://d2x73ruoixi2ei.cloudfront.net/images/logos/channels/24/affin.gif",
      "logo_url_32x32": "https://d2x73ruoixi2ei.cloudfront.net/images/logos/channels/32/affin.gif",
      "logo_url_120x43": "https://d2x73ruoixi2ei.cloudfront.net/images/logos/channels/120/affin.gif",
      "channel_type": "IB"
    }
  }
}
```

Channel Success Rate API

In order to know the healthiness of payment channels, this API allows system-wide or merchant-only successful rate (OK rate) of a channel in real time for frequently used payment channels. Merchants can always check the latest 1 hour system-wide OK rate of the channel (card payment and internet banking) and a few window sizes, i.e. the latest 1, 3, 6, and 12 hours for merchant-only OK rate for all channels, including Razer Cash. Keep in mind that Razer Cash is not a real-time payment channel and sampling is based on payment request time and not the time that payment is made.

This API gives a worst case scenario result, please DO NOT approach the PG support team if your number of transactions of a specific payment channel is less than 30 or if there are multiple failure attempts from the same buyer. Try to optimize your OK rate (success rate or SR) if yours are far below the system-wide level. Frequent query on merchant-only OK rate might slow down your payment processing as well.

Prompt alert or warning instead of turning off the channel at 0% or low system-wide OK rate is always a best practice.

Request

URL: <https://api.fiuu.com/RMS/API/chkstat/OK-rate.php>

Method: GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--|---|
| domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| reqTime | YYYYMMDDHHmmss | Request date & time, e.g. 20161202153423 |
| reqType | Global, Merchant | Global: system-wide OK rate Merchant: merchant only OK rate |
| skey | 32 chars hexadecimal string | For merchant access verification purpose |
| duration | 1, 3, 6, 12 (for reqType=merchant only) | Latest sampling window size in hour for merchant-only request. If the total sampling number is less than 30, it has less reference value due to the low statistical significance and n/a will be given |

Response (JSON format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|---|--|
| StatTime | YYYYMMDDHHmmss | Status date & time, e.g. 20161202153435 |
| OK-rate | { "Channel 1" : OK_rate1, "Channel 2" : OK_rate2, | Channel name with successful rate measure at the StatTime. Please refer to "Direct Server API" or "Seamless Integration" for channel name. |

| | | |
|--|------------------|---|
| | <pre>} ...</pre> | <pre>{ "credit": 75, "maybank2u": 70, "cimbclicks": 65, "fpx": 56, "hlb": 60, "rhb": 52, ... "fpx_pbb": 45, "fpx_bimb": 80, }</pre> <p>where the OK rate is an integer range from 0-100. Channel might be added/removed without prior notice.</p> |
|--|------------------|---|

Formula of skey

| |
|--|
| <code>skey = md5({domain}{secret_key}{reqTime}{reqType})</code> |
|--|

Card BIN information API

To retrieve the card BIN information such as card type and the issuer information.

Request

URL: https://api.fiuu.com/RMS/query/q_BINinfo.php

Method: GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|-----------------------------|--|
| domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| skey | 32 chars hexadecimal string | For merchant access verification purpose |
| BIN | 6-digit numeric | First 6-digit number of the PAN, e.g. 519603 |

Response (JSON format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--|---|
| card_brand | VISA / MASTERCARD / AMEX / UP / JCB / DC | MASTERCARD |
| card_issuer | ans{100} | CIMB BANK BERHAD |
| debit_credit | DEBIT / CREDIT / PREPAID / N/A | CREDIT |
| card_type | ans{100} | STANDARD other example like GOLD, PLATINUM, CLASSIC, co-brand name is available |
| card_country | ISO-3166-1 alpha-2 | MY |
| islamic_card | Y / N | Y |

PG will respond the following in JSON format once error occurs (negative result)

| Field Name | Data Type(Size) | Description |
|------------|-----------------|---------------------|
| error_code | an{7} | Refer to Appendix A |
| error_desc | ans{1..255} | Refer to Appendix A |

Formula of skey

$$\text{skey} = \text{md5}(\{\text{domain}\}\{\text{secret_key}\}\{\text{BIN}\})$$

Appendix A : Error Code & Description in JSON

| error_code | error_desc |
|------------|---|
| QBIN001 | Missing required Parameter. |
| QBIN002 | Merchant info not found. |
| QBIN003 | Invalid skey. |
| QBIN004 | Card BIN info not found. |
| QBIN005 | System is busy now, temporarily out of service. Please try again later. |

Foreign Exchange Rate API

In order to know the current foreign exchange (FX) of each supported currency, this API allows merchants to know the current exchange rate for each supported currency.

Request

URL: https://api.fiuu.com/RMS/query/q_fx_rate.php

Method: GET

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|-----------------------------|---|
| domain | alphanumeric, 32 chars | Merchant ID in PG system. |
| reqtime | YYYYMMDD | Request date & time, e.g. 20161202 |
| source | optional, 1-digit integer | Predefined value as below: 1. BNM 2. Maybank 3. WeChat |
| skey | 32 chars hexadecimal string | For merchant access verification purpose |

Response (JSON format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|-------------------------|--------------------------------|---|
| base | 3 chars ISO-4217 currency code | MYR |
| reqtime | YYYYMMDD | 20170128 |
| rate | float(2,4) in array | 1.2888 |
| [currency] under "rate" | 3 chars ISO-4217 currency code | Currency to compared with MYR (USD,SGD,etc) |

Formula of skey

```
skey = md5( {domain}{verify_key}{reqTime} )
```

Will list out the list of currency, exchange rate compared to 1 MYR with rate expiration date/time.

```
{
  "base": "MYR"
  "reqtime": "20170128"
  "rate":{
    "USD":{"units":1,"rates":0.24425989252565},
    ...
  }
}
```

Void Pending-Cash API

For merchants to cancel and void the cash payment request order, before getting paid or the expiry time, and force-to-expired.

Request

URL: <https://api.fiuu.com/RMS/API/VoidPendingCash/index.php>

Method: POST or GET

| Field Name | Data Type(Size) | M/O | Description |
|------------|-----------------|-----|---|
| tranID | n{1..20} | M | PG Transaction ID |
| amount | n{10,2} | M | The total amount to be paid in one purchase order. 2 decimal points, comma(,) is not allowed. |
| merchantID | an{1..32} | M | Merchant ID provided by PG |
| checksum | an{32} | M | This is request integrity protection hash string. |

Formula of checksum

checksum = md5({tranID}{amount}{merchantID}{verify_key})

Response

PG responds JSON format to merchant upon a successful request

| Field Name | Data Type(Size) | M/O | Description |
|------------|-----------------|-----|--|
| StatCode | n{2} | M | 00 = Success (voided) 11 = Missing required parameter (<FieldName>). 12 = Merchant info not found 13 = Invalid checksum value. 14 = Transaction not found 15 = Transaction not Pending 99 = System is busy now, temporary out of services. Please try again later. |
| tranID | n{1..20} | O | PG Transaction ID |
| orderid | an{1..40} | O | Merchant order |
| amount | n{10,2} | O | The total amount to be paid in one purchase order |
| merchantID | an{1..32} | O | Merchant ID provided by PG |
| channel | an{1..32} | O | Channel references for the merchant system |

Void Pending Non-Cash API

For merchants to cancel and void the non-cash payment request order (generated from direct server API), before getting paid within the expiry time, and force-to-expired.

Request

URL: <https://api.fiuu.com/RMS/API/VoidPendingNonCash/index.php>

Method: POST or GET

| Field Name | Data Type(Size) | M/O | Description |
|-------------|-----------------|-----|---|
| ReferenceNo | an{1..32} | M | Merchant reference no |
| TxnChannel | an{1..32} | M | Channel references |
| TxnAmount | n{10,2} | M | The total amount to be paid in one purchase order. 2 decimal points, comma(,) is not allowed. |
| MerchantID | an{1..32} | M | Merchant ID provided by PG |
| Signature | an{32} | M | This is a request integrity protection hash string. |

Formula of Signature

Signature= hash_mac("sha256", {ReferenceNo}{TxnAmount}{MerchantID}, {verify_key})

Response

PG responds JSON format to merchant upon a successful request

| Field Name | Data Type(Size) | M/O | Description |
|-------------|-----------------|-----|--|
| StatCode | n{2} | M | 00 = Success (canceled) 11 = Missing mandatory parameter. 12 = Merchant info not found 13 = Invalid checksum value. 14 = Transaction not found 15 = Transaction already in captured status.Not voidable. 16 = Transaction already in failed status.Not voidable. 99 = System is busy now, temporarily out of service. Please try again later. |
| ReferenceNo | an{1..32} | O | Merchant reference no |
| TxnAmount | n{10,2} | O | The total amount to be paid in one purchase order |
| MerchantID | an{1..32} | O | Merchant ID provided by PG |
| TxnChannel | an{1..32} | O | Channel references for the merchant system |

Recurring Plan API

For merchants to retrieve recurring plans info which were created from the merchant portal.

Request

URL: https://api.fiuu.com/RMS/API/Recurring/get_plans.php

Method: POST or GET

| Field Name | Data Type(Size) | M/O | Description |
|----------------------|-----------------|-----|--|
| domain | an{1..32} | M | Merchant ID provided by PG |
| charge_on_endofmonth | a{1} | O | Predefined value as below: 1. Y 2. N |
| period | a{3..8} | O | Predefined value as below: 1. month 2. week 3. day 4. year 5. quarter 6. halfyear 7. bimonth 8. biweek |
| cycle_term | n{1..10} | O | Billing cycle (E.g. '6', '12', '24') |
| status | a{2..3} | O | Predefined value as below: 1. On 2. Off 3. NA |
| skey | an{32} | M | This is request integrity protection hash string. |

Response (JSON format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| planID | n{1..10} | Unique ID for each plan. |
| plan_name | ans{1..64} | Plan name. |
| plan_desc | ans{1..255} | Plan description. |
| amount | n{10,2} | The total amount to be paid in each cycle. |
| period | a{3..8} | Predefined value as below: 1. month 2. week 3. day 4. year |

| | | |
|----------------------|----------|--|
| | | 5. quarter 6. halfyear 7. bimonth 8. biweek |
| status | a{2..3} | Predefined value as below: 1. On 2. Off 3. NA |
| cycle_term | n{1..10} | Billing cycle (E.g. '6', '12', '24') |
| charge_on_endofmonth | a{1} | Predefined value as below: 1. Y 2. N |

Formula of skey

skey = md5({domain}{**secret_key**}{charge_on_endofmonth}{period}{cycle_term}{status})

PG will respond the following in JSON format once error occurs (negative result)

| No | Field Name | Data Type(Size) | Description |
|----|------------|-----------------|---------------------|
| 1 | error_code | an{7} | Refer to Appendix A |
| 2 | error_desc | ans{1..255} | Refer to Appendix A |

Appendix A : Error Code & Description in JSON

| error_code | error_mesg |
|------------|--|
| PLAN001 | Missing required parameter (<FieldName>). |
| PLAN002 | Merchant info not found. |
| PLAN003 | Invalid skey. |
| PLAN004 | Plan not found. |
| PLAN005 | System is busy now, temporary out of services. Please try again later. |
| PLAN006 | Invalid parameter value (<FieldName>). |

Payment Token API

Available upon request

Token API - Generate Token / Provisioning

For merchants to generate the payment token without payment authorization.

PCI-DSS Attestation of Compliance (AoC) is required in order to unlock this API for merchant.

Request

URL: <https://pay.fiuu.com/RMS/API/token/index.php>

Method: POST

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| action | as{32} | Action of this request - ADD_TOKEN |
| billing_name | as{32} | Buyer's full name |
| billing_mobile | ns{32} | Buyer's mobile number or contact number |
| billing_email | ans{128} | Buyer's email address |
| custID | ans{40} | Unique customer ID that will bind with the token |
| merchantID | ans{32} | Merchant ID in PG system |
| token_type | ans{1} {Optional} | Based on the recurring token type { T } |
| detail | ans | Information that will be used to generate a token. Refer to Token API - detail . |
| signature | ans | For merchant access verification purpose |

Response (JSON format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| status | a{5} | true - success return false - failed return |
| merchantID | ans{32} | Merchant ID in PG system. |
| billing_name | as{32} | Buyer's full name |
| billing_mobile | ns{32} | Buyer's mobile number or contact number. |
| billing_email | ans{128} | Buyer's email address. |
| token | ans{16...50} | Card FPAN that has been tokenized by Payment Gateway (payment token) |

| | | |
|------------|---------|--|
| bin | n{6..8} | First 6 or 8 digit of the card number |
| bin4 | n{4} | Last 4 digit of the card number |
| expYear | n{4} | Card expiry year |
| expMonth | n{2} | Card expiry month, e.g. February is 02 |
| token_type | ans{1} | Based on the recurring token type { T } |

Formula of signature

```
signature = hash_hmac( 'SHA256',
{action}{billing_email}{billing_mobile}{billing_name}{detail}{merchantID}{token_type}, {verify_key} )
```

Example (in JSON format)

The following example might not be accurate and please only take it as a format reference

```
{
  "status": true,
  "merchantID": "merchantIDSB",
  "billing_name": "abc",
  "billing_email": "abc@email.com",
  "billing_mobile": "012-3456789",
  "token": "1234567890",
  "bin": "123456",
  "bin4": "8901",
  "expYear": "2099",
  "expMonth": "12",
  "token_type": "T",
}
```

Token API - Retrieve Token

For merchants to retrieve the token based on the buyer information.

Request

URL: <https://pay.fiuu.com/RMS/API/token/index.php>

Method: POST

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| action | as{32} | Action of this request - GET_TOKEN |
| billing_name | as{32} | Buyer's full name |
| billing_mobile | ns{32} | Buyer's mobile number or contact number |
| billing_email | ans{128} | Buyer's email address |
| custID | ans{40} | Customer ID that bind with token |
| merchantID | ans{32} | Merchant ID in PG system |
| token_type | ans{1} {Optional} | Based on the recurring token type { T, F, E, K, A } Respond all token type if not provided |
| signature | ans | For merchant access verification purpose |

Response (JSON format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| status | a{5} | true - success return false - failed return |
| tokens | object | [...] |
| token | ans{16..50} | Payment token |
| bin | n{6..8} | First 6 or 8 digit of the card number |
| bin4 | n{4} | Last 4 digit of the card number |
| expYear | n{4} | Card expiry year |
| expMonth | n{2} | Card expiry month, e.g. February is 02 |
| token_type | ans{1} | Based on the recurring token type { T, F, E, K, A } |
| card_brand | ans{20} | Card brand VISA / MASTERCARD / AMEX / UP / JCB / DC |

| | | |
|-------------|---------|-------------------------------------|
| card_issuer | ans{20} | Bank name which issues the card |
| card_type | ans{10} | Card type - PREPAID , DEBIT, CREDIT |

Formula of signature

```
signature = hash_hmac( 'SHA256',
{action}{billing_email}{billing_mobile}{billing_name}{merchantID}{token_type}, {verify_key} )
```

Example (in JSON format)

The following example might not be accurate and please only take it as a format reference

```
{
  "status": true,
  "tokens": [
    {
      "token": "555111112315454545",
      "bin": "550690",
      "bin4": "0001",
      "expYear": "2030",
      "expMonth": "02",
      "token_type": "T",
      "card_brand": "MASTERCARD",
      "card_issuer": "AFFIN BANK",
      "card_type": "DEBIT"
    }
  ]
}
```

Token API - Retrieve Buyer Information

Available upon request

For merchants to retrieve the token information such as credit card first 6 and last 4 digit, credit card exp date, card type and the issuer information.

Request

URL: <https://pay.fiuu.com/RMS/API/token/index.php>

Method: POST

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| action | as{32} | Action of this request - GET_TOKEN_DETAILS |
| token | ans{16...50} | Payment token |
| custID | ans{40} | Customer ID that bind with token |
| merchantID | ans{32} | Merchant ID in PG system. |
| signature | ans | For merchant access verification purpose |

Response (JSON format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| status | a{5} | true - success return false - failed return |
| bin | n{6} | First 6 digit of card number |
| bin4 | n{4} | Last 4 digit of card number |
| card_brand | ans{20} | Card brand VISA / MASTERCARD / AMEX / UP / JCB / DC |
| card_type | ans{20} | Card type - PREPAID , DEBIT, CREDIT |
| expYear | n{4} | Card expiry year |
| expMonth | n{2} | Card expiry month |
| billing_name | a{32} | Buyer's full name |
| billing_mobile | ns{32} | Buyer's mobile number or contact number. |
| billing_email | ans{128} | Buyer's email address. |
| token_type | a{1} | Payment Channel |

Formula of signature

```
signature = hash_hmac( 'SHA256', {action}{merchantID}{token}, {verify_key} )
```

Token API - Edit Token Details

Available upon request

For merchants to modify the token detail based on the generated active token.

Request

URL: <https://pay.fiuu.com/RMS/API/token/index.php>

Method: POST

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|---|
| action | as{32} | Action of this request - EDIT_TOKEN_DETAILS |
| billing_name | as{32} | Original buyer's full name |
| billing_mobile | ns{32} | Original buyer's mobile number or contact number. |
| billing_email | ans{128} | Original buyer's email address. |
| custID | ans{40} | Customer ID that bind with token |
| merchantID | ans{32} | Merchant ID in PG system. |
| token | ans{16..50} | Payment token |
| detail | ans | Information that will be used to edit token details. Refer to Token API - detail . |
| signature | ans | For merchant access verification purpose |

Response (JSON format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| status | a{5} | true - Success edit token detail false - Failed edit token detail |

Formula of signature

```
signature = hash_hmac( 'SHA256',  
{action}{billing_email}{billing_mobile}{billing_name}{detail}{merchantID}{token}, {secret_key} )
```

Token API - Delete Token

Available upon request

For merchants to delete the token based on buyer information.

Request

URL: <https://pay.fiuu.com/RMS/API/token/index.php>

Method: POST

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| action | as{32} | Action of this request - DELETE_TOKEN |
| token | ans{16..50} | Payment token |
| billing_name | as{32} | Buyer's full name |
| billing_mobile | ns{32} | Buyer's mobile number or contact number |
| billing_email | ans{128} | Buyer's email address |
| custID | ans{40} | Customer ID that bind with token |
| merchantID | an{32} | Merchant ID in PG system |
| signature | ans | For merchant access verification purpose |

Response (JSON format)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|--------------------------|--|
| status | a{5} | true - Success delete token false - Failed delete token |

Formula of signature

```
signature = hash_hmac( 'SHA256',  
{action}{billing_email}{billing_mobile}{billing_name}{merchantID}{token}, {secret_key} )
```

Token API - Error Handling

PG will respond the following in JSON format once error occurs (negative result)

| Field Name | Data Type(Size) | Description |
|------------|-----------------|------------------------------|
| status | a{5} | false - request failed/error |
| error_code | n{4} | Refer to Appendix A |
| error_desc | ans{1..255} | Refer to Appendix A |

Token Error Code & Description in JSON

| error_code | error_mesg |
|------------|--|
| TK01 | Invalid parameter value ({parameter_name}) |
| TK02 | Missing parameter value ({parameter_name}) |
| TK03 | Merchant info not found |
| TK04 | Incorrect signature |
| TK05 | Record not found |

Token API - detail

Merchants will include the following information during request the following token action.

| Token Type | Variable / Parameter | Type Format / Max Length | Description / Example |
|--------------------|---|--------------------------|--|
| ADD_TOKEN | | | |
| T | cardnumber | n{16} | Card number to tokenize. |
| | month | MM{2} | Expiry month |
| | year | YYYY{4} | Expiry year |
| | Procedure to generate: <ol style="list-style-type: none">1. Request PG to provide RSA public key.2. JSON encode the variable and its data.3. Using Open SSL to encrypt the JSON information with an RSA public key.4. Base64 encode the encrypted data generated from the OpenSSL public key encryption.5. Add the output in the detail variable. | | |
| EDIT_TOKEN_DETAILS | | | |
| T | billing_name | as{32} | Buyer's full name |
| | billing_mobile | ns{32} | Buyer's mobile number or contact number. |
| | billing_email | ans{128} | Buyer's email address. |
| | Procedure to generate: <ol style="list-style-type: none">1. JSON encode the variable and its data.2. Add the encoded JSON in the detail variable. | | |

Idempotence Request

Idempotency allows you to retry a request multiple times while only performing the action once. This helps avoid unwanted duplication in case of failures and retries. For example, in the case of a timeout error, it is possible to safely retry sending the same API payment call multiple times with the guarantee that the payment detail will only be charged once.

The accounting rules in the PG take care of most potential double-processing issues that can impact payment modifications. To minimize unwanted side effects when requests are duplicated.

Implement idempotency

To submit a request for idempotent processing, include an idempotency-key:<key> in the request header.

The <key> should be a unique identifier for the message, with a maximum length of 64 characters (including symbols). We recommend using a version 4 (random) UUID. If you don't receive a response (e.g., due to a timeout), you can safely retry the request with the same HTTP header. If the PG has already processed the request, the response from the first attempt will be returned without duplication.

To verify that a request was processed idempotently, check the idempotency-key HTTP header in the response.

Sample Request Header

| Key | Type Format / Max Length | Description / Example |
|-----------------|--------------------------|--|
| idempotence-key | ans(64) | Any alphanumeric character or UUIDv4 e.g. d4fa5b34-306e-47b6-88ee-9104b918375b |

Jump App Integration

Certain channels, especially E-wallet support Tap & Pay functionality, enabling seamless transactions with just a tap, primarily in a mobile device flow. To ensure proper handling of transaction notifications, it is required to add an event listener that manages the app URL or Universal Link, facilitating a smooth user experience and ensuring the app responds appropriately to the incoming data.

Implementation:

1. Adds an event listener to detect when the system is redirected to a specific page (triggered URL).
2. When an app URL or universal URL is triggered after the webview reaches a specific page, the opened URL will be opened with new intent.
3. When a channel mobile app is opened to proceed payment, it is optional to update the specific page and redirect it to a self setup loading page, which will have continuous [checking transaction status](#) in a certain timeframe. (E.g. 5 minutes waiting time with 10 seconds interval time)

| Channel | Triggered URL | Universal Link / App URL |
|--------------|--|--|
| TNG-EWALLET | {path}/intermediate_eTNG-EWALLET.php | m.tngdigital.com.my/{path} |
| BOOST | https://msp.boost-my.com/{path} | https://myboost.app.link/{path} |
| ShopeePay | {path}/intermediate_app/loading.php | https://my.shp.ee/{path} |
| Atome | https://gateway.atome.my/{path} | https://atome-my.onelink.me/{path} |
| LINEPAY | https://web-pay.line.me/{path} | line://pay/payment/{path} |
| SCB_IB_U | https://scbpaymentgateway.scb.co.th/{path} | https://info.scb.co.th/scbeasy/easy_app_link.html/{path} |
| KTB_IB_U | https://p2p.krungthai.com/{path} | ktbnext://next.co.th/{path} |
| 9PAY_EWALLET | https://9pay.vn/merchant/{path} | https://9pay.page.link/{path} |
| Alipay | https://mclient.alipay.com/{path} | alipays://{path} |
| Shopback | https://checkout.shopback.my/{path} | https://app.shopback.com/pay/{path} |

DuitNow QR Account Enquiry Notify

DuitNow QR account enquiry is a functionality that allows DuitNow-supported banks and wallets to verify the validity of a QR code with the QR issuer. Merchants can request to enable the notification feature, which alerts them when the generated QR code has been scanned by the user. This webhook will use the same URL as the payment notification and deliver the information directly to the merchant. The integration for this feature can refer [Notification URL with IPN](#).

Notification Parameters (via POST method)

| Variable / Parameter | Type Format / Max Length | Description / Example |
|----------------------|---------------------------------------|---|
| nbc | 1 digit numeric | Always equal to 2, which indicates this is a notification from PG |
| amount | 2 decimal points numeric value | The total amount to be paid for the payment request |
| orderid | alphanumeric, 40 characters | Invoice or order number from merchant system |
| tranID | integer, 10 digits | Unique transaction ID for tracking purpose |
| domain | alphanumeric, 32 chars | Merchant ID in PG system |
| status | 2-digit numeric value | 22 for Pending payment |
| appcode | alphanumeric, 16 chars | Bank approval code. Mandatory for card payment. Certain channels return empty value. |
| error_code | alphanumeric | Refer to the Error Codes section. |
| error_desc | text | Error message or description. |
| skey | 32 chars hexadecimal string | This is the data integrity protection hash string. Refer <i>skey</i> section for details. |
| currency | 2 or 3 chars (ISO-4217) currency code | Default currency is MYR (indicating Malaysia Ringgit) for Malaysia channels |
| channel | predefined string in system | Channel references for merchant system |
| paydate | Date/Time(YYYY-MM-DD HH:mm:ss) | Date/Time of the transaction. |
| extraP* | optional (on request) | Example: { "account_enquiry": "true", "enquirydate": "2023-12-12 12:12:12" } |

ExtraP

Contains additional information provided by the payment processor.
Parameter ExtraP is a JSON encoded string.

| Variable / Parameter | Description / Example | |
|-----------------------|--|-----------------------|
| token | Alphanumeric with symbol up to 50 characters payment token for merchant to store for upcoming recurring MIT (merchant initiated transaction) | |
| CustID | Customer ID that will bind with the token | |
| fraudscreen | 1-digit integer, i.e. 1=Unknown, 2=Passed, 3=Alert, 4=Suspicious, 5=Fraud | |
| fpx_txn_id | FPX transaction ID | |
| fpx_buyer_name | FPX buyer name | |
| buyer_name | buyer name (if any for non-FPX channel) | |
| billing_name | Biller Name | |
| billing_mobile | Biller Mobile | |
| billing_email | Biller Email | |
| ccbrand | Visa, MasterCard, AMEX | |
| bank_issuer | The issuing bank or institution | |
| ccbin | Issuer/Bank identification number, first 6-digit | |
| cclast4 | Last 4-digit of card number | |
| cctype | Credit, Debit, Prepaid | |
| cccountr | Card issuing country | |
| paymentMethod | ApplePay,GooglePay | |
| grabpay_indicator | GPWALLET, INSTALMENT_4, POSTPAID | |
| duitnowqr_indicator | DuitNow Ref ID | |
| ProcessorResponseCode | Authorization response code | |
| ProcessorCVVResponse | Credit Card validation response code | |
| | Value | Description |
| | M | Indicate cvc match |
| | N | Indicate cvc no match |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|---------|-------|-------------|------|---------|--------------------------------------|----|----|--|--|----|------------------|----|--|--|----|----|----------------------|--|----|--|--|
| | P | Indicate cvc not process, the card scheme or issuer was unable to verify the cvc value | | | | | | | | | | | | | | | | | | | | | | |
| | S | Indicate cvc should be on the card, because the card scheme or issuer wants perform cvc verification | | | | | | | | | | | | | | | | | | | | | | |
| | U | Indicate cvc unverified, because issuer does not participate in cvc service | | | | | | | | | | | | | | | | | | | | | | |
| SchemeTransactionID | Transaction ID provided by CC Schemes. | | | | | | | | | | | | | | | | | | | | | | | |
| MerchantAdviceCode | <p>MasterCard issuers use the Merchant Advice Code (MAC) in authorization request responses to communicate with merchants about a cardholder's account</p> <table><tr><td>Value</td><td colspan="2">Description</td></tr><tr><td>01</td><td colspan="2">New account information available</td></tr><tr><td>02</td><td colspan="2">Cannot approve at this time, try again later</td></tr><tr><td>03</td><td colspan="2">Do not try again</td></tr><tr><td>04</td><td colspan="2">Token requirements not fulfilled for this token type</td></tr><tr><td>21</td><td colspan="2">Payment Cancellation</td></tr><tr><td>22</td><td colspan="2">Merchant does not qualify for product code</td></tr></table> | | | Value | Description | | 01 | New account information available | | 02 | Cannot approve at this time, try again later | | 03 | Do not try again | | 04 | Token requirements not fulfilled for this token type | | 21 | Payment Cancellation | | 22 | Merchant does not qualify for product code | |
| Value | Description | | | | | | | | | | | | | | | | | | | | | | | |
| 01 | New account information available | | | | | | | | | | | | | | | | | | | | | | | |
| 02 | Cannot approve at this time, try again later | | | | | | | | | | | | | | | | | | | | | | | |
| 03 | Do not try again | | | | | | | | | | | | | | | | | | | | | | | |
| 04 | Token requirements not fulfilled for this token type | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Payment Cancellation | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | Merchant does not qualify for product code | | | | | | | | | | | | | | | | | | | | | | | |
| ECI | <p>Electronic Commerce Indicator (ECI) is a value returned by Directory Servers (namely Visa, MasterCard, MyDebit, JCB, and American Express) indicating the outcome of authentication attempted on transactions enforced by 3DS</p> <table><tr><td></td><td>Mastercard</td><td>Visa</td><td>MyDebit</td></tr><tr><td>Cardholder authentication successful</td><td>02</td><td>05</td><td>15</td></tr><tr><td>Attempted to authenticate the cardholder</td><td>01</td><td>06</td><td>16</td></tr><tr><td>Non-authenticated e-commerce transaction</td><td>00</td><td>07</td><td>17</td></tr></table> | | | | Mastercard | Visa | MyDebit | Cardholder authentication successful | 02 | 05 | 15 | Attempted to authenticate the cardholder | 01 | 06 | 16 | Non-authenticated e-commerce transaction | 00 | 07 | 17 | | | | | |
| | Mastercard | Visa | MyDebit | | | | | | | | | | | | | | | | | | | | | |
| Cardholder authentication successful | 02 | 05 | 15 | | | | | | | | | | | | | | | | | | | | | |
| Attempted to authenticate the cardholder | 01 | 06 | 16 | | | | | | | | | | | | | | | | | | | | | |
| Non-authenticated e-commerce transaction | 00 | 07 | 17 | | | | | | | | | | | | | | | | | | | | | |
| LocalCardScheme | Card transacted through a local card network | | | | | | | | | | | | | | | | | | | | | | | |
| AvsStreet | Street validation status | | | | | | | | | | | | | | | | | | | | | | | |
| AvsZip | Zip/Postcode validation status | | | | | | | | | | | | | | | | | | | | | | | |
| AvsResponse | Association validation status | | | | | | | | | | | | | | | | | | | | | | | |

| | | |
|---------------|---|---|
| captured_date | Date/Time of the transaction status updated from authorized to captured | |
| store_id | 7eleven store id (Only for Cash 711) | |
| store_name | 7eleven store name (Only for Cash 711) | |
| store_address | 7eleven store address (Only for Cash 711) | |
| metadata | Respond metadata in JSON format | |
| lcpMemberId | ESUN unique number (for TW ESUN channels only) | |
| DbtrAgt | Debtor BIC Code (Only for DuitNow QR channel) | |
| DbtrAcct_Type | Debtor account type (Only for DuitNow QR channel) | |
| | Value | Description |
| | CACC | Current Account |
| | SVGS | Savings Account |
| | CCRD | Credit Card |
| | WALL | e-Wallet |
| | DFLT | Either Savings or Current |
| TxnType | Transaction type (Only for DuitNow QR channel) | |
| | Value | Description |
| | DOMESTIC | Transaction initiated from a Malaysian domestic account |
| | CROSSBORDER | Transaction initiated from a non-Malaysian account |
| refundability | Value will be either "true" or "false" (Only for DuitNow QR channel) | |

ERROR CODES

Payment Page

| Error Code | Description |
|------------|--|
| P01 | Timeout |
| P02 | Your transaction has been denied due to merchant account issue. Payment channel is not available for merchant. |
| P03 | Your payment info format not correct ! Incorrect security hash string, check "vcode". |
| P04 | not allow to process Incomplete buyer information, check bill_name, bill_mobile, bill_email, orderid, faked mobile such as 0123456789 will be blocked as well |
| P05 | Payment gateway not found Invalid payment gateway file or channel code. |
| P06 | System is busy now, temporary out of services. Please try again later. |
| P07 | Access Denied. Requestor not authorize. Merchant URL is not allowed to process payment or not yet registered with PG. |
| P08 | Invalid referral |
| P09 | Duplicate payment is not allowed for this merchant. Payment with same order ID and amount is not allowed to capture twice. Cash payment is not allowed to request twice. |
| P10 | Sorry, Your Credit Card Number or CVV or expiration date is not valid |
| P11 | Amount return from bank not match with PG system. |
| P12 | Signature from bank not match. |
| P13 | Currency not supported. |
| P14 | Transaction amount must more than CUR XXX.XX. |
| P15 | Transaction amount must less than CUR XXX.XX. |
| P16 | Invalid subMerchantID |
| P17 | Unable to retrieve the currency exchange rate |
| P18 | Empty currency rate |
| P19 | Invalid Order ID |
| P21 | Massive errors detected from the same IP address |
| P22 | Massive errors detected from the same IP address |

| | |
|-------|--|
| P33 | System is busy |
| P44 | Bill description format incorrect |
| P45 | Subtotal amount not match with bill amount |
| P46 | Merchant is not allowed to use this payment method |
| P47 | Bank under maintenance |
| P48 | TxnType not supported for this channel |
| P49 | Original TransactionID/SchemeID not found |
| P50 | Card not eligible for installment plan |
| P51 | Only debit card is allowed for this payment. |
| P52 | Invalid customer ID |
| P53 | Transaction rejected due to card expired. |
| P54 | Transaction rejected due to exceeded attempt limit in this month. Please try again next month. |
| P55 | Card type is not supported. |
| P56 | Invalid payment expiration time |
| P57 | Invalid parameter format for metadata, must be in JSON format |
| P58 | Country IP address is rejected by merchant |
| P403 | Invalid payment URL |
| P404 | Invalid merchant ID |
| P409 | Duplicate request is not allowed |
| P990 | Sorry, we're not able to process your request now. You may close this window. |
| P991 | System temporary not available due to security issue |
| P992 | Sorry, no matching transaction or profile detail found for the return_url. |
| P993 | Sorry, the return url doesn't match with the transaction or profile. |
| P1813 | URL is not allowed |
| R01 | Error in payment process due to empty key |
| T01 | Tokenization error |
| 01 | Unsuccessful Timeout due to user did not authorize the payment |
| 33 | Transaction declined as the payment window has expired |
| 34 | Transaction refunded or voided due to success payment exceeding payment window |
| 36 | Transaction voided via VoidPendingNonCash API |

| | |
|-----|---|
| 99 | Record not found Timeout due to user did not proceed with the payment |
| E99 | Exception occurred during the transaction |
| 999 | Transaction is blocked Due to one of the reason: country restriction, blacklist, exceeds transaction limit |

3DS Error

| Error Code | Description |
|------------|--|
| P3011 | This merchant only allows 3DS card |
| P3089 | Invalid 3DS request |
| P3099 | Card not authorized or invalid BIN |
| MD2310 | rejected due to non-3DS (a feature of PG to block non-3DS transaction) |
| 3000 | Transaction end with not successful status |
| 3001 | Card authentication failed |
| 3002 | Unknown Device |
| 3003 | Unsupported Device |
| 3004 | Exceeds authentication frequency limit |
| 3005 | Expired card |
| 3006 | Invalid card number |
| 3007 | Invalid transaction |
| 3008 | No Card record |
| 3009 | Security failure |
| 3010 | Stolen card |
| 3011 | Suspected fraud |
| 3012 | Transaction not permitted to cardholder |
| 3013 | Cardholder not enrolled in service |
| 3014 | Transaction timed out at the ACS |
| 3015 | Low confidence |
| 3016 | Medium confidence |
| 3017 | High confidence |
| 3018 | Very High confidence |

| | |
|------|---|
| 3019 | Exceeds ACS maximum challenges |
| 3020 | Non-Payment transaction not supported |
| 3021 | 3RI transaction not supported |
| 3022 | ACS technical issue |
| 3023 | Decoupled Authentication required by ACS but not requested by 3DS Requestor |
| 3024 | 3DS Requestor Decoupled Max Expiry Time exceeded |
| 3025 | Decoupled Authentication was provided insufficient time to authenticate cardholder. ACS will not make attempt |
| 3026 | Authentication attempted but not performed by the cardholder. |
| 4000 | Transaction has timeout |
| 5000 | Transaction ended with exception happened at 3DS Server |
| 6000 | Transaction ended with Error Message is raised from one of the 3D participants |
| 7000 | 3DS Server received an invalid Authentication Request |

Payment Status Query (PSQ) Error

Different query status API uses different standard error code due to legacy reasons. Developer may group these error codes based on the grouping in the following table:

- **Direct Status Requery API** - 5 digit number . For eg : Q00001,Q00002.
- **Indirect Status Requery API** 2 - 3 digit number. For eg: Q01, Q02, Q203

| Error Code | Description |
|---|--|
| Q01 / Q00001 | Missing Required Parameter ({parameter_name}). |
| Q02 / Q00002 | Invalid Parameter Value ({parameter_name}). |
| Q03 / Q00007 | System is busy now, temporary out of services. Please try again later. |
| Q04 / Q00003 | Merchant info not found. |
| Q05 / | Send result to merchant URL failed. |
| Q06 | Query period expired. No result available for transaction more than 7 days. |
| Q07 | Exceeded the maximum limit of tIDs or oIDs of 10. |
| Q00008 | Error encountered due to external service disruption. Kindly retry. |
| Q99 | Service blocked due to massive connection. Please send only 1 request every 5 minutes. |
| Q101 / Q201 / Q00004 | Correct skey with invalid data |
| Q00004 / Q102 / Q202 / Q302 / Q402 / Q502 | Incorrect skey |
| Q203 / Q303 / Q00005 | Transaction record not found |
| Q204 | Incorrect amount |
| Q401 | Delimiter error |

Error in Merchant Admin

| Error Code | Description |
|------------|----------------------------------|
| M0001 | Inactive merchant account |
| M0002 | Frozen merchant account |
| M0003 | Merchant account has been purged |
| M0098 | Invalid merchant ID |
| M0099 | Unable to process the request |
| M1007 | Invalid bank account number |

| | |
|-------|-------------------------------------|
| M1008 | Invalid email |
| M1009 | Invalid bank account number & email |

Error Codes from Payment Channel

PG will add the following prefix to all card and certain internet banking error codes

| | |
|--------------------------------------|------|
| Credit Card (CyberSource, MPGS, etc) | CC_ |
| FPX Internet Banking | FPX_ |

| Error Code Description |
|---|
| Prepaid/Debit/Credit Card (Visa/MasterCard) Host Error 00 Successful approval/completion or that V.I.P. PIN verification is valid 01 Refer to card issuer 02 Refer to card issuer, special condition 03 Invalid merchant or service provider 03 Invalid merchant 04 Pickup card 04 Capture card 05 Do not honor / Incorrect CVV or 3D password 05 Do not honor 06 Error 07 Pickup card, special condition (other than lost/stolen card) 08 Honor with ID 10 Partial Approval-Private label 11 V.I.P. approval 12 Invalid transaction 12 Default psp message 12 The Authorization Request Cryptogram (ARQC) was checked but failed verification 13 Invalid amount (currency conversion field overflow. Visa Cash-invalid load mount) 14 Invalid account number (no such number) 15 No such issuer 19 Re-enter transaction 21 No action taken (unable to back out prior transaction) 25 Unable to locate record in file, or account number is missing from the inquiry 28 File is temporarily unavailable 30 Format Error 39 No Credit Account 41 Pickup card (lost card) 41 Lost card 43 Pickup card (stolen card) 43 Stolen card 46 Closed account 51 Insufficient funds |

52 | No checking account
 53 | No savings account
 54 | Expired card
 55 | Incorrect PIN (Visa Cash-invalid or missing S1 signature)
 55 | Invalid PIN
 57 | Transaction not permitted to cardholder (Visa Cash-incorrect routing, not a load request)
 57 | Transaction not permitted to issuer
 58 | Transaction not allowed at terminal
 58 | Transaction not permitted to acquirer
 59 | Suspected fraud
 61 | Activity amount limit exceeded
 61 | Exceeds withdrawal amount limit
 62 | Restricted card (for example, in Country Exclusion table)
 63 | Security violation
 64 | Transaction does not fulfill AML requirement
 65 | Activity count limit exceeded
 65 | Exceeds withdrawal count limit
 6P | Verification data failed
 70 | Contact Card Issuer
 71 | PIN Not changed
 74 | Different value than that used for PIN encryption errors
 75 | Allowable number of PIN-entry tries exceeded
 75 | Allowable number of PIN tries exceeded
 76 | Unable to locate previous message (no match on Retrieval Reference number)
 76 | Invalid
 77 | Previous message located for a repeat or reversal, but repeat or reversal data are in consistent with original message
 78 | "Blocked, first used"—Transaction from new cardholder, and card not properly unblocked
 78 | Invalid
 78 | Invalid/nonexistent account specified (general)
 79 | Updated information was found in the Mastercard ABU database. Check for new information before reattempting.
 79 | Cannot approve at this time, try again later.
 79 | Updated credentials are not found to be available in the MastercardABU database. Do not retry.
 79 | Life cycle
 80 | Invalid date (For use in private label card transactions and check acceptance transactions)
 81 | PIN cryptographic error found (error found by VIC security module during PIN decryption)
 82 | Incorrect CVV/iCVV
 82 | Default psp message
 82 | Invalid transaction
 82 | CVV, iCVV, dCVV, or Online CAM failed verification, or Offline PIN authentication was interrupted.
 82 | Cannot approve at this time, try again later.
 82 | Updated information was found in the Mastercard ABU database. Check for new information before reattempting.
 82 | Updated credentials are not found to be available in the MastercardABU database. Do not retry.
 82 | Policy
 83 | Fraud/Security(MasterCard use only) / Unable to verify PIN
 83 | Cannot approve at this time, try again later.
 83 | Authentication may improve the likelihood of an approval. Retry using authentication (such as EMV3DS).
 83 | Suspected fraud. Do not retry.
 83 | Fraud
 84 | Invalid Authorization Life Cycle
 85 | No reason to decline a request for account number verification or address verification
 85 | Not declined (Valid for all zero amount transactions)
 86 | Pin Validation not possible
 86 | Can not verify PIN
 87 | Purchase Amount Only, No Cash Back Allowed
 88 | Cryptographic failure
 89 | Unacceptable PIN—Transaction Declined—Retry
 89 | Violation of law
 90 | Cutoff is in progress
 91 | Issuer unavailable or switch inoperative (STIP not applicable or available for this transaction)
 91 | Financial institution or intermediate network
 92 | Destination cannot be found for routing
 93 | Transaction cannot be completed; violation of law
 94 | Duplicate transaction detected
 96 | System malfunction or certain field error conditions
 96 | System error

N0 | Force STIP
 N3 | Cash service not available
 N4 | Cash request exceeds issuer limit
 N7 | Decline for CVV2 failure
 P2 | Invalid biller information
 P5 | PIN Change/Unblock request declined
 P6 | Unsafe PIN

Card via MIGS (Visa/MasterCard)

0 | Transaction Successful
 ? | Transaction status is unknown
 1 | Unknown Error
 2 | Bank Declined Transaction
 3 | No Reply from Bank
 4 | Expired Card
 5 | Insufficient funds
 6 | Error Communicating with Bank
 7 | Payment Server System Error
 8 | Transaction Type Not Supported
 9 | Bank declined transaction (Do not contact Bank)
 A | Transaction Aborted
 C | Transaction Cancelled
 D | Deferred transaction has been received and is awaiting processing
 F | 3D Secure Authentication failed
 I | Card Security Code verification failed
 L | Shopping Transaction Locked (Please try the transaction again later)
 N | Cardholder is not enrolled in Authentication scheme
 P | Transaction has been received by the Payment Adaptor and is being processed
 R | Transaction was not processed - Reached limit of retry attempts allowed
 S | Duplicate SessionID (OrderInfo)
 T | Address Verification Failed
 U | Card Security Code Failed
 V | Address Verification and Card Security Code Failed
 Y | The cardholder was successfully authenticated.
 E | The cardholder is not enrolled.
 N | The cardholder was not verified.
 U | The cardholder's Issuer was unable to authenticate due to some system error at the Issuer.
 F | There was an error in the format of the request from the merchant.
 A | Authentication of your Merchant ID and Password to the ACS Directory Failed.
 D | Error communicating with the Directory Server.
 C | The card type is not supported for authentication.
 S | The signature on the response received from the Issuer could not be validated.
 P | Error parsing input from Issuer.
 I | Internal Payment Server system error.

05 | Fully Authenticated
 06 | Not authenticated (cardholder not participating), liability shift
 07 | Not authenticated due to a system problem

Card via eBPG (Visa/MasterCard)

0 Process with No Error.
 1001 Error setting mandatory fields
 1002 Invalid value for TRANSACTION_TYPE! Acceptable Value : QUERY=1
 1003 This transaction is not authorized
 1004 Error setting mandatory fields
 1005 Invalid MERCHANT_ACC_NO! Unable to find merchant with provided MERCHANT_ACC_NO.
 1006 The status of this MERCHANT_ACC_NO is suspended! All transactions are not allowed temporary. Please check with administrator for the status.
 1007 The status of this MERCHANT_ACC_NO is still pending and not yet activated. Please check with administrator for the status.
 1008 The status of this MERCHANT_ACC_NO is invalid! Please check the merchant setting.
 1009 The setting of this MERCHANT_ACC_NO does not allow the requested transaction type. Please check the merchant setting.

| | |
|------|---|
| 1010 | The setting of this MERCHANT_ACC_NO do not allow transaction request from this IP address. Please checks the merchant allow IP setting. |
| 1011 | Error setting mandatory fields |
| 1012 | Invalid value for AMOUNT |
| 1013 | Error setting mandatory fields |
| 1014 | Error setting mandatory fields |
| 1015 | Error setting mandatory fields |
| 1016 | Error setting mandatory fields |
| 1017 | Invalid value for CARD_NO. CARD_NO must be numeric and with valid length! |
| 1018 | Invalid value for CARD_EXP_MM. CARD_EXP_MM must be numeric and with valid length! |
| 1019 | Invalid value for CARD_EXP_YY. CARD_EXP_YY must be numeric and with valid length! |
| 1020 | Invalid value for CARD_CVC. CARD_CVC must be numeric and with valid length! |
| 1021 | Invalid payment method. Please call bank to check Merchant Settings. |
| 1022 | Amount has been over transaction limit for today. Please call bank to check Merchant Settings. |
| 1023 | Transaction not permitted through this merchant type. Please call bank to check Merchant Settings. |
| 1024 | This transaction is not allowed to void due to transaction has already settled or status is not Sale or Captured. |
| 1025 | Error setting mandatory fields |
| 1026 | Invalid Card Type. The card number is not match with the card type. |
| 1027 | Sorry, your card is expired. Please use another card. |
| 1028 | Invalid Card Expired Month. CARD_EXP_MM must be from 01 to 12. |
| 3001 | Error setting mandatory fields |
| 3002 | Error setting mandatory fields |
| 3003 | Error setting mandatory fields |
| 3004 | Error setting mandatory fields |
| 3005 | Invalid value for RESPONSE_TYPE for non-3D transaction! Acceptable Value : HTTP |
| 3006 | Error setting mandatory fields |
| 3007 | Invalid value for SECURE_SIGNATURE! Computed signature does not match one included in the request. |
| 3008 | Invalid format for SECURE_SIGNATURE! SECURE_SIGNATURE must be length of 128 |
| 3009 | Unable to find the transaction record! |
| 3010 | MERCHANT_ACC_NO not matched with previous submitted transaction request! To capture/query previous transaction |
| 3011 | AMOUNT not matched with previous submitted transaction request! To capture/query previous transaction |
| 3012 | CUSTOMER_ID not matched with previous submitted transaction request! To capture/query previous transaction |
| 3013 | MERCHANT_TRANID not matched with previous submitted transaction request! To capture/query previous transaction |
| 3014 | Insecure mode for RETURN_URL. Please specify an URL which uses HTTPS protocol! |
| 3015 | Insecure mode for TXN_URL. Please specify an URL which uses HTTPS protocol! |
| 4001 | Error setting mandatory fields |
| 4002 | Error setting mandatory fields |
| 4003 | Duplicate MERCHANT_TRANID detected! Please ensure the MERCHANT_TRANID is always unique. |
| 4004 | Error setting mandatory fields |
| 4005 | Error setting mandatory fields for 3D transaction |
| 4006 | Error setting mandatory fields for 3D transaction |
| 4007 | Error setting mandatory fields for 3D transaction |
| 4008 | Error setting mandatory fields for 3D transaction |
| 4009 | Error setting mandatory fields for 3D transaction |
| 4010 | Error setting mandatory fields for 3D transaction |
| 4011 | Error setting mandatory fields for 3D transaction |
| 4012 | Error setting mandatory fields for 3D transaction |
| 4013 | Transaction failed to send to bank host because the merchant 3D setting is (BLOCK_NON_3D) |
| 4014 | Transaction failed to send to bank host because the merchant 3D setting is (ALLOW_ATTEMPTED_AND_3D) |
| 5001 | Error setting mandatory fields for fraud risk detection |
| 5002 | Error setting mandatory fields for fraud risk detection |
| 5003 | Error setting mandatory fields for fraud risk detection |
| 5004 | Error setting mandatory fields for fraud risk detection |
| 5005 | Error setting mandatory fields for fraud risk detection |
| 5006 | Error setting mandatory fields for fraud risk detection |
| 5007 | Error setting mandatory fields for fraud risk detection |
| 5008 | Transaction was blocked due to fraud level exceeded threshold limit. |
| 5009 | Transaction was blocked due to blacklisted card detected. |
| 5201 | Invalid payment indicator! |
| 5202 | Mismatch number of Payment Indicator and Payment Criteria! |
| 5203 | Invalid delimiter for Payment Indicator & Payment Criteria. Use "€";"€™" only. |
| 5204 | Sorry, your request cannot be proceed due to the specified payment criteria was invalid or not found! |
| 5205 | Transaction was blocked due to card range filtering based on merchant setting. |
| 5206 | Transaction was blocked due to card range filtering by payment indicator. |
| 5207 | Unknown card range indicator received. |

5208 Merchant not support instalment.
 5209 Merchant instalment plan not found.
 5210 Transaction amount is not within instalment allowed range.
 5211 Merchant transaction support instalment only.
 5212 Invalid merchant instalment plan format.
 5213 Invalid Promote Code.
 5214 Invalid Bin Filtering.
 5215 Promotion Exceed Maximum Usage.
 5216 No Promotion Found.
 5217 Error setting mandatory fields
 5218 Payment Link ID is empty
 5219 Sorry, the system is unable to locate the payment link transaction with the id specified.
 5220 The current payment link status is unavailable for process.
 5221 The payment link transaction has been expired.
 5222 The transaction is already been processed
 5223 Parameter length exceeds maximum length.
 5224 Instalment is not allowed.
 5225 Invalid incoming parameter name.
 5226 Not allowed to proceed void for instalment transaction.
 6001 Unable to get connection to MPI Server!
 6002 Time out occurred during communication with MPI Server!
 6003 Unable to update MPI Ref. No in system. Please try again.
 6004 There was an error occurred during 3D authentication with MPI. Please check logs for details.
 6005 Invalid message or response received from MPI. Please try again.
 6006 MPI Settings are not configured correctly. Please check MPI_HOST and MPI_PORT in system configuration.
 6007 Error occurred when trying to display ACS Form in web browser for 3D authentication. Please try again.
 6008 Problem occurred on MPI side
 6009 Unable to locate back transaction to update system after 3-D authentication process. Please try again.
 6010 Empty response received from MPI
 6011 MPI Code received is not allowed to proceed to process the transaction.
 6012 Transaction was aborted because 3-D authentication process is not completed.
 6013 Attempted duplicate submission of 3-D authentication result. Please try with new transaction.
 6014 MALL NAME is required for 3-D transaction. Please call bank to check Merchant Settings.
 6015 MALL URL is required for 3-D transaction. Please call bank to check Merchant Settings.
 6016 Invalid value for RESPONSE_TYPE for 3D transaction! Acceptable Value : HTTP only
 6017 Time out occurred while waiting for ACS response.
 6018 Error formatting mandatory field for 3D transaction while generating message to bank host
 6019 Error formatting mandatory field for 3D transaction while generating message to bank host
 7001 REFUND COMPLETED
 8001 This MERCHANT_ACC_NO is not authorized to proceed with this transaction via website! Please check the merchant setting.
 8002 This MERCHANT_ACC_NO is not authorized to proceed with this transaction via batch upload! Please check the merchant setting.
 8003 Exception while query Payment Server!
 8004 Exception while checking for fraud risk!
 8005 Settlement in Progress
 9999 Internal Exception. Please call bank to report.
 9988 Server Time Out Exception.
 9977 Bank Connection Error!
 9966 Reply from bank is empty/incorrect!
 9967 Bank rejected transaction!
 9968 Transaction Timeout.
 9969 Payment Window Timeout.
 9955 Error when trying to insert transaction table. Transaction ID is empty!
 9933 Server interruption occurred during processing. Manual checking required. Please inform Administrator.
 9935 Cancel payment by customer.
 51020 DS/ACS communication error.
 62030 VERes message: Unexpected VERes.
 64910 PAREs message: Received TX.status value = N (Authentication fail or cancelled).
 64930 PAREs message: Signature verification fail.
 333317 Invalid {parameter name} : {required format} (This error code is for 3D2.0 additional parameters)
 333318 Length of CARD HOLDER_NAME must be at least 2.
 333319 Time out occurred during communication with 3DSS Server!
 333320 3DS Server returned unsuccessful response {- error details if available}
 333321 {Parameter name} JSON is invalid.

333322 3D type not found in 3D type supported card scheme.
 333323 Error setting mandatory fields for 3D2 transaction. MPI_CODE must be in length of 44 and contains "-" sign

Card via Cybersource(Visa/MasterCard)

| Error Code | Error Prefix | Description |
|------------|------------------|---|
| 100 | SOK | Successful transaction |
| 101 | DMISSINGFIELD | Declined - The request is missing one or more fields |
| 102 | DINVALIDDATA | Declined - One or more fields in the request contains invalid data. |
| 104 | DDUPLICATE | Declined - The merchantReferenceCode sent with this authorization request matches the merchantReferenceCode of another authorization request that you sent in the last 15 minutes. |
| 110 | SPARTIALAPPROVAL | Partial amount was approved |
| 150 | ESYSTEM | Error - General system failure. |
| 151 | ETIMEOUT | Error - The request was received but there was a server timeout. This error does not include timeouts between the client and the server. |
| 152 | ETIMEOUT | Error: The request was received, but a service did not finish running in time. |
| 154 | ESYSTEM | Bad MaC key |
| 200 | DAVSNO | Soft Decline - The authorization request was approved by the issuing bank but flagged by Cybersource because it did not pass the Address Verification Service (AVS) check. |
| 201 | DCALL | Decline - The issuing bank has questions about the request. You do not receive an authorization code programmatically, but you might receive one verbally by calling the processor. |
| 202 | DCARDEXPIRED | Decline - Expired card. You might also receive this if the expiration date you provided does not match the date the issuing bank has on file. |
| 203 | DCARDREFUSED | Decline - General decline of the card. No other information provided by the issuing bank. |
| 204 | DCARDREFUSED | Decline - Insufficient funds in the account. |
| 205 | DCARDREFUSED | Decline - Stolen or lost card. |
| 207 | DCARDREFUSED | Decline - Issuing bank unavailable. |

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| 208 | DCARDREFUSED | Decline - Inactive card or card not authorized for card-not-present transactions. |
| 209 | DCARDREFUSED | Decline - card verification number (CVN) did not match. |
| 210 | DCARDREFUSED | Decline - The card has reached the credit limit. |
| 211 | DCARDREFUSED | Decline - Invalid Card Verification Number (CVN). |
| 220 | DCHECKREFUSED | Decline - Generic Decline. |
| 221 | DCHECKREFUSED | Decline - The customer matched an entry on the processor's negative file. |
| 222 | DCHECKREFUSED | Decline - customer's account is frozen |
| 230 | DCV | Soft Decline - The authorization request was approved by the issuing bank but flagged by Cybersource because it did not pass the Card Verification Number (CVN) check. |
| 231 | DINVALIDCARD | Decline - Invalid account number |
| 232 | DINVALIDCARD | Decline - The card type is not accepted by the payment processor. |
| 233 | DINVALIDDATA | Decline - General decline by the processor. |
| 234 | DINVALIDDATA | Decline - There is a problem with your Cybersource merchant configuration. |
| 235 | DINVALIDDATA | Decline - The requested amount exceeds the originally authorized amount. Occurs, for example, if you try to capture an amount larger than the original authorization amount. |
| 236 | DINVALIDDATA | Decline - Processor failure. |
| 237 | DINVALIDDATA | Decline - The authorization has already been reversed. |
| 238 | DINVALIDDATA | Decline - The transaction has already been settled. |
| 239 | DINVALIDDATA | Decline - The requested transaction amount must match the previous transaction amount. |
| 240 | DINVALIDDATA | Decline - The card type sent is invalid or does not correlate with the credit card number. |
| 241 | DINVALIDDATA | Decline - The referenced request id is invalid for all follow-on transactions. |

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| 242 | DNOAUTH | Decline - The request ID is invalid. |
| 243 | DINVALIDDATA | Decline - The transaction has already been settled or reversed. |
| 246 | DNOTVOIDABLE | Decline - The capture or credit is not voidable because the capture or credit information has already been submitted to your processor. Or, you requested a void for a type of transaction that cannot be voided. |
| 247 | DINVALIDDATA | Decline - You requested a credit for a capture that was previously voided. |
| 248 | DBOLETODECLINED | Decline - The boleto request was declined by your processor. |
| 250 | ETIMEOUT | Error - The request was received, but there was a timeout at the payment processor. |
| 251 | DCARDREFUSED | Decline - The Pinless Debit card's use frequency or maximum amount per use has been exceeded. |
| 254 | DINVALIDDATA | Decline - Account is prohibited from processing stand-alone refunds. |
| 268 | ETIMEOUT | Transaction Error: Unable to confirm, please contact Barclaycard help desk. Do not re-process |
| 400 | DSCORE | Soft Decline - Fraud score exceeds threshold. |
| 450 | DINVALIDADDRESS | Apartment number missing or not found. |
| 451 | DINVALIDADDRESS | Insufficient address information. |
| 452 | DINVALIDADDRESS | House/Box number not found on street. |
| 453 | DINVALIDADDRESS | Multiple address matches were found. |
| 454 | DINVALIDADDRESS | P.O. Box identifier not found or out of range. |
| 455 | DINVALIDADDRESS | Route service identifier not found or out of range. |
| 456 | DINVALIDADDRESS | Street name not found in Postal code. |
| 457 | DINVALIDADDRESS | Postal code not found in database. |
| 458 | DINVALIDADDRESS | Unable to verify or correct address. |
| 459 | DINVALIDADDRESS | Multiple address matches were found (international) |

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|-----|-----------------------|---|
| 460 | DINVALIDADDRESS | Address match not found (no reason given) |
| 461 | DINVALIDADDRESS | Unsupported character set |
| 475 | DAUTHENTICATE | The cardholder is enrolled in Payer Authentication. Please authenticate the cardholder before continuing with the transaction. |
| 476 | DAUTHENTICATIONFAILED | Encountered a Payer Authentication problem. Payer could not be authenticated. |
| 478 | DAUTHENTICATE | Strong customer authentication (SCA) is required for this transaction. |
| 480 | DREVIEW | The order is marked for review by Decision Manager |
| 481 | DREJECT | The order has been rejected by Decision Manager |
| 490 | | Your aggregator or acquirer is not accepting transactions from you at this time. |
| 491 | | Your aggregator or acquirer is not accepting this transaction. |
| 520 | DSETTINGS | Soft Decline - The authorization request was approved by the issuing bank but declined by Cybersource based on your Smart Authorization settings. |
| 700 | DRESTRICTED | The customer matched the Denied Parties List |
| 701 | DRESTRICTED | Export bill_country/ship_country match |
| 702 | DRESTRICTED | Export email_country match |
| 703 | DRESTRICTED | Export hostname_country/ip_country match |

PayNet FPX Internet Banking (MY)

00 | Approved
 03 | Invalid Merchant
 05 | Seller Account Closed
 09 | Transaction Pending
 12 | Invalid Transaction
 13 | Invalid Amount
 14 | Invalid Buyer Account
 20 | Invalid Response
 30 | Transaction Not Supported For Model Or Format Error
 31 | Invalid Bank
 39 | No Credit Bank

45 | Duplicate Seller Order Number
 46 | Invalid Seller Exchange Or Seller
 47 | Invalid Currency
 48 | Maximum Transaction Limit Exceeded
 49 | Merchant Specific Limit Exceeded
 50 | Invalid Seller for Merchant Specific Limit
 51 | Insufficient Funds
 53 | No Saving Account
 57 | Transaction Not Permitted
 58 | Transaction to Merchant Not Permitted
 65 | Withdrawal Frequency Exceeded
 70 | Invalid Serial Number
 76 | Transaction Not Found
 77 | Invalid Buyer Name Or Buyer Id
 78 | Decryption Failed
 79 | Host Decline When Down
 80 | Buyer Cancel Transaction
 83 | Invalid Transaction Model
 84 | Invalid Transaction Type
 85 | Internal Error At Bank System
 87 | Debit Failed Exception Handling
 88 | Credit Failed Exception Handling
 89 | Transaction Not Received Exception Handling
 90 | Bank Internet Banking Unavailable
 92 | Invalid Buyer Bank
 96 | System Malfunction
 98 | MAC Error
 99 | Pending for Authorization (Applies to B2B model)
 BB | Blocked by Bank
 BC | Transaction Cancelled By Customer
 DA | Invalid Application Type
 DB | Invalid Email Format
 DC | Invalid Maximum Frequency
 DD | Invalid Frequency Mode
 DE | Invalid Expiry Date
 DF | Invalid e-Mandate Buyer Bank ID
 FE | Internal Error
 OE | Transaction Rejected As Not In FPX Operating Hours
 OF | Transaction Timeout
 SB | Invalid Seller Bank Code
 XA | Invalid Source IP Address (Applicable for B2B2 model)
 XB | Invalid Seller Exchange IP
 XC | Seller Exchange Encryption Error
 XE | Invalid Message
 XF | Invalid Number of Orders
 XI | Invalid Seller Exchange
 XM | Invalid FPX Transaction Model
 XN | Transaction Rejected Due To Duplicate Seller Exchange Order Number
 XO | Duplicate Exchange Order Number
 XS | Seller Does Not Belong To Exchange
 XT | Invalid Transaction Type
 XW | Seller Exchange Date Difference Exceeded
 1A | Buyer Session Timeout at Internet Banking Login Page
 1B | Buyer failed to provide the necessary info to login to IB Login page
 1C | Buyer choose cancel at Login Page
 1D | Buyer session timeout at Account Selection Page
 1E | Buyer failed to provide the necessary info at Account Selection Page
 1F | Buyer choose cancel at Account Selection Page
 1G | Buyer session timeout at TAC Request Page
 1H | Buyer failed to provide the necessary info at TAC Request Page
 1I | Buyer choose cancel at TAC Request Page
 1J | Buyer session timeout at Confirmation Page
 1K | Buyer failed to provide the necessary info at Confirmation Page
 1L | Buyer choose cancel at Confirmation Page
 1M | Internet Banking Session Timeout

2A | Transaction Amount Is Lower Than Minimum Limit

Alipay (CN)

| Error Code | Description |
|--|---|
| ILLEGAL_SIGN | Illegal signature |
| ILLEGAL_ARGUMENT | Illegal parameters |
| HASH_NO_PRIVILEGE | No sufficient rights to complete the query |
| ILLEGAL_SERVICE | Service Parameter is incorrect |
| ILLEGAL_PARTNER | Incorrect Partner ID |
| ILLEGAL_SIGN_TYPE | sign_type parameter is incorrect |
| FOREX_MERCHANT_NOT_SUPPORT_THIS_CURRENCY | Cannot support this kind of currency |
| ILLEGAL_SECURITY_PROFILE | Cannot support this kind of encryption |
| REPEAT_OUT_TRADE_NO | out_trade_no parameter is repeated |
| ILLEGAL_CURRENCY | Currency parameter is incorrect |
| ILLEGAL_PARTNER_EXTERFACE | Service is not activated for this account |
| SYSTEM_EXCEPTION | Contact Alipay technical support for help |
| ILLEGAL_TIMEOUT_RULE | Timeout_rule parameter is incorrect |
| ILLEGAL_CHARSET | Illegal charset |
| 99/TRADE_NOT_EXIST | Customer did not make payment/Fail onboarding |

Razer Gold

| Error Code | Error Description |
|------------|---|
| 40001 | Required parameter is required. / Parameter format is invalid. |
| 40002 | Invalid API Version. |
| 40003 | Invalid Currency Code or not supported. |
| 40004 | Duplicate Reference Id. The transaction was refused as a result of a duplicate Reference Id supplied. Currency Code is not match with previous transaction. The transaction was refused as a result of a duplicate Reference Id supplied. Pin is not match with previous transaction. |
| 40005 | Invalid Channel Id. |
| 40006 | Invalid Amount. |
| 40007 | Invalid PIN. |
| 40008 | Invalid Client IP Address. |
| 40009 | The transaction was declined by Razer Gold because of possible fraudulent activity. |
| 40013 | Payment Amount Exceed channel maximum accepted amount. |

| | |
|-------|---|
| 40014 | Payment Amount less than channel minimum accepted amount. |
| 40101 | Invalid Application Code. |
| 40102 | Unauthorized Server IP Address. |
| 40103 | Invalid Signature. |
| 40104 | Channel Id not permitted. |
| 40400 | Payment not found. |

UnionPay (CN)

00 Payment is successful.
 01 Refer to card issuer.
 03 Invalid merchant.
 05 Merchant or seller account closed.
 06 Issuer card is expired.
 09 Request in progress.
 12 Invalid transaction.
 13 Invalid amount.
 14 Invalid buyer account or card information.
 17 Buyer cancel transaction.
 22 Suspected malfunction.
 25 Failure to search an original transaction.
 30 Format error or MAC error.
 31 Invalid bank.
 39 No credit account.
 51 Insufficient fund.
 53 No saving account.
 57 Transaction not permitted.
 61 Withdrawal limit exceeded.
 65 Withdrawal frequency exceeded.
 76 Transaction not found.
 77 Invalid buyer name or buyer Id.
 79 Host decline when down.
 85 Internal error at bank's system.
 87 Debit failed (exception handling).
 88 Credit failed (exception handling).
 89 Transaction not received (exception handling).
 92 Financial institution or intermediate network facility cannot be found for routing.
 93 Transaction cannot be completed.
 FE Internal error.
 OE Transaction rejected as not in operating hours.
 OF Transaction timeout.
 OA Session timeout.
 1A Buyer session timeout at bank login page.
 1B Buyer failed to provide the necessary info to login to bank login page.
 1C Buyer choose cancel at login page.
 1D Buyer session timeout at account selection page.
 1E Buyer failed to provide the necessary info at account selection page.
 1F Buyer choose cancel at account selection page.
 1G Buyer session timeout at TAC request page.
 1H Buyer failed to provide the necessary info at TAC request page.
 1I Buyer choose cancel at TAC request page.
 1J Buyer session timeout at confirmation page.
 1K Buyer failed to provide the necessary info at confirmation page.
 1L Buyer choose cancel at confirmation page.
 2A Transaction amount is lower than minimum limit.

Boost (MY)

| Error Code | Description |
|------------|--|
| E0005 | Invalid input value mandatory parameter missing |
| E0006 | Message too long. Maximum length characters |
| E0007 | Message too short. Minimum length characters |
| E0008 | Invalid email format |
| E0009 | Invalid date format, expected format |
| E0010 | Invalid Double value format |
| E0013 | Invalid msisdn format |
| E0016 | Error occurred |
| E0017 | Invalid value format for path variable |
| E0020 | Merchant not found |
| E0021 | Merchant integration info not found |
| E0022 | Payment transaction token Expired |
| E0023 | Merchant transaction not found |
| E0024 | Already payment done for given payment Transaction Token |
| E0027 | Customer wallet balance not sufficient |
| E0032 | Validation Failure Invalid Merchant category |
| E0038 | Minimum Bio Data [image count] not found |

GrabPay (MY/PH/SG)

| Error Code | Description |
|-------------------------------|--|
| 99/ Invalid transaction_id | Customer did not make payment |
| 99/Record not found | Record not found |
| currency_mismatch | Currency used in this request mismatches with merchant configuration. |
| init_record_not_exist | The initiate payment action is not completed. |
| payment_not_found | Original payment is not found or not completed for the refund request. |
| partial_refund_not_allowed | Partial refund is not allowed for this transaction. |
| merchant_insufficient_balance | Merchant balance is insufficient. |
| exceed_payment_amount | Refund amount exceeds payment amount |

| | |
|----------------------------|--|
| no_record_found | No record found for this transaction |
| charging | System is processing a charge request |
| Refunding | System is processing a refund request |
| invalid_request | The request is missing a required parameter, includes an invalid value, includes a parameter more than once, or is otherwise malformed |
| unauthorized_client | The client is not authorized to request an authorization code using this method |
| Access_denied | The resource owner or authorization server denied the request |
| unsupported_response_type | The authorization server does not support obtaining an authorization code using this method |
| invalid_scope | The requested scope is invalid, unknown, or malformed |
| server_error | The authorization server encountered an unexpected condition that prevented it from fulfilling the request |
| temporarily_unavailable | The authorization server is currently unable to handle the request due to a temporary overloading or maintenance of the server. |
| interaction_required | The Authorization Server requires some form for end-user interaction to proceed. This error may be returned when the prompt parameter value in the Authentication Request is 'none' but cannot be completed without displaying a user interface for end-user interaction. |
| login_required | The Authorization Server requires end-user authentication. This error may be returned when the prompt parameter value in Authentication Request is none but cannot be completed without displaying a user interface for end-user authentication |
| account_selection_required | The end-user is required to select a session at the Authorization server. The end-user may be authenticated at the Authorization server with different associated accounts, but he did not select a session. This error may be returned when the 'prompt' parameter value in Authentication Request is 'none' but cannot be completed without displaying a user interface to prompt for a session to use |
| consent_required | The Authorization Server requires end-user consent. This error may be returned when the prompt parameter value in the Authentication Request is 'none' but cannot be completed without displaying user interface for end user consent. |
| invalid_request_uri | The request_uri in the Authorization Request returns an error or contains invalid data |
| invalid_request_object | The Request parameter contains an invalid Request Object |
| request_not_supported | The OP does not support the use of the Request parameter |
| request_uri_not_supported | The OP does not support the use of the request_uri parameter |
| registration_not_supported | The OP does not support the use of the Registration parameter |
| user_canceled | The user has requested to cancel the transaction. |
| session_expired | The session for this transaction has expired. |
| invalid_acr_values | An invalid acr_values parameter was passed in the generated Web URL. Please ensure that the acr_values query parameter is generated in the correct format. |

| | |
|------------------------|---|
| invalid_token | An invalid request object was passed in the generated Web URL. Be sure to only use a request parameter that was returned in a successful Initiate Payment step. |
| invalid_argument | There are invalid parameters passed with the generated Web URL. Ensure that all required parameters are sent in the URL in the correct format. |
| mfa_not_completed | The multi-factor authentication step for the user was not successful. |
| transaction_not_found | A valid transaction could not be located from the specified request. Ensure that all required parameters are sent in the URL, and in the correct format. |
| kyc_compliance_decline | Transaction was unsuccessful due to regulatory compliance checks. |
| transaction_declined | Transaction was declined. |
| client_error | Transaction could not be completed due to an unspecified user error in the checkout flow. |
| insufficient_balance | Transaction could not be completed due to an insufficient balance on the user's selected payment method. |
| unknown | Transaction could not be processed in time. As a result, the transaction will be canceled. Users may still encounter a temporary hold of funds in their wallet. |
| confirm_failed | (LEGACY) A user or server error has happened in the checkout flow. |

MAE by Maybank2U (MY)

| Error Code | Description |
|------------|---|
| QR098 | Sorry, we could not complete your request at this time. Please try again later |
| QR090 | Mandatory fields missing |
| QR091 | Invalid QR ID |
| QR092 | Invalid Terminal ID |
| QR122 | Your account has been locked or Inactive. Please call our Customer Care Hotline at 1300 888 6688 for assistance |
| QR155 | Invalid Transaction |
| 401 | Failed to verify OAuth information |

Touch 'n Go eWallet (MY)

| Error Code | Description | Action/Remarks |
|-----------------|---|--|
| 00000000/INIT | Order is not paid/Paid but unfinished | |
| 00000000/CLOSED | Order is closed | |
| PAYING | Order is paid but not finish | Order is paid successfully for PAY-CONFIRM |
| MERCHANT_ACCEPT | Order is accepted by merchant after order is paid for PAY-CONFIRM | |

| CANCELLED | Order is cancelled | |
|---------------------------------|--|--|
| WeChat Pay (CN & MY) | | |
| Error Code | Description | Action/Remarks |
| SUCCESS | Payment successful | |
| REFUND | Order to be refunded | |
| NOTPAY | Order not paid | |
| CLOSED | Order closed | |
| REVOKED | Order revoked | |
| USERPAYING | Awaiting user to pay | |
| PAYERROR | Payment failed (payment status failed to be returned by bank or other reasons) | |
| 0000 | Successful | |
| 9994 | Merchant does not support Institution or Agency mode | The Merchant ID is a direct merchant. Please check the Merchant ID |
| 9995 | Sub Merchant ID does not belong to the Merchant | Please check the Sub Merchant ID first |
| 9996 | Error Signature Algorithm | Check the sign type and for more information. |
| 9997 | Invalid Merchant ID | Invalid Merchant ID or Sub Merchant ID. Please check the ID first |
| 9998 | Error verifying signature | Check the signature process in detail |
| 9999 | System Error | Call the Query Order API to check the current order status. The Status determined which process will be taken next. |
| 0100 | Order does not exist | The order status is unknown. It is suggested to call the API once again |
| 0101 | Order does not exist | The order status is unknown. It is suggested to call the API once again |
| 0102 | Order does not match | Check the program in detail, and confirm the matching relation between Merchant's Order Number and WeChat Pay Order Number |
| 0203 | Order does not match. | Check the program in detail, and confirm the matching relation between Merchant's Order Number and WeChat Pay Order Number. |
| 0001 | Payment is in progress | Waiting for the user to enter the password/Pin on the smart phone. The Merchant's backend can check the payment result regularly |
| 0011 | Not sufficient funds | The customer's account balance is insufficient and you can suggest the customer to change the account |

| | | |
|-------|--|--|
| 0012 | Reached transaction limit | The current payment mode of the customer has reached transaction limit, and you can suggest the customer to change the way of payment mode |
| 0013 | Rejected due to risk assessment | The transaction has been rejected due to risk assessment by WeChat Pay automatically. You can suggest the customer to change the way of payment mode or contact the WeChat Pay Customer Service Team |
| 0014 | Reject by bank card issuer | The transaction has been rejected by bank card issuer. You can suggest the customer to change the way of payment mode or contact the card issuer |
| 0015 | Invalid QR code | It is suggested that the shop assistant can scan the QR code once again or customer reload the QR code |
| 0201 | Order does not exist. | Check the program in detail, and confirm the validity of WeChat Pay Order Number |
| 0201 | Order does not exist | Check the program in detail, and confirm the validity of Merchant's Order Number |
| 0202 | Order does not match | Check the program in detail, and confirm the matching relation between Merchant's Order Number and WeChat Pay Order Number |
| 0203 | Order does not match | Check the program in detail, and confirm the matching relation between Merchant's Order Number and WeChat Pay Order Number |
| 0204 | Incorrect order status | The order which has been paid or refunded cannot be closed |
| 0300 | Order does not exist | Check the program in detail and confirm the validity of WeChat Pay Order Number |
| 0301 | Order does not match | Check the program in detail and confirm the validity of Merchant's Order Number |
| 0302 | Order does not match | Check the program in detail and confirm the matching relation between Merchant's Order Number and WeChat Pay Order Number. |
| 0303 | Order does not match | Check the program in detail and confirm the matching relation between Merchant's Order Number and WeChat Pay Order Number. |
| 0304 | The amount of is not consistent with the original order. | Check the program in detail and confirm the validity of the original order information. |
| 03005 | Exceed the refundable amount | The total amount of refunds should not be more than the amount of payment. |
| 03006 | Incorrect order status | The unpaid or closed order cannot be refunded |
| 0350 | Error verifying Merchant certificate | Check whether the Merchant certificate used is valid |
| 0201 | Order does not exist | Check the program in detail, and confirm the validity of Merchant's Order Number. |
| 0203 | Order paid for more than 1 day cannot be revoked | Order paid for more than 1 day cannot be revoked and you can call the Refund Order API to submit a refund |

| | | |
|------|--------------------------------------|--|
| 0250 | Error verifying Merchant certificate | Check whether the Merchant certificated used is valid |
| 0400 | Order does not match | Check the program in detail, and confirm the validity of order parameter |
| 0401 | Order does not exist | Check the program in detail, and confirm the validity of WeChat Pay Order Number or WeChat Pay Refund Number |
| 0402 | Order does not exist | Check the program in detail, and confirm the validity of Merchant's Order Number or Merchant's Refund Number |
| 0500 | Failed to download | Confirm the validity of the data parameter first |

eNETS Debit

| Error Code | Description | Action/Remarks |
|---------------|---|--|
| 00000 | Payment successful | Transaction is approved. |
| 01000 | Payment declined. Call Bank. | Bank has declined the transaction because customer cancelled it at the bank login page. |
| 01001 | Payment declined. Please try again. | Bank has declined the transaction with unknown reason and indicated customer to try again. |
| 01002 | Payment declined. Please contact card issuer | Customer's account has Insufficient Funds |
| 01003 | Payment declined. Please contact Merchant | Bank declined with Security Violation |
| 01005 / 01006 | Payment declined. Invalid Account | Bank has declined the transaction because customer does not have a Cheque Account |
| 01007 | Payment declined. Invalid Account | Bank has declined the transaction because customer does not have a Savings Account |
| 01010 | Payment declined. Exceeded activity/pin-retry Limit | Bank has declined the transaction with unknown reason and indicated customer to try again |
| 01011 | Payment declined. Exceeded Account Limit | Bank has declined the transaction because customer exceeded their account limit |
| 01039 | Payment declined - User Session Expired | Bank has declined the transaction because of Timeout due to customer inactivity |
| 02001 | Payment declined. Time out. | Gateway has declined the transaction because timeout on backend has occurred. |
| 02002 | Payment declined. User Session Expired. | Payment declined. User Session Expired. |
| 02003 | Payment declined. User Cancelled Txn | Payment declined. User Cancelled Txn |

| 02200 | Payment declined. Please contact card issuer | Gateway has declined the transaction because issuer/bank related problems |
|---------------|--|---|
| KBank_PayPlus | | |
| Failure Code | Failure Message | |
| 99 | Payment Failed | |
| 0500 | Invalid Message Format | |
| 1001 | No register | |
| HOST30209 | (HOST30209) The account cannot be processed. Please contact the bank branch of account. | |
| 04 | Bill Expired (ER04) | |
| KP1001 | Require field not found (identify field name in error message) | |
| KP2000 | Unauthorized partner | |
| KP9999 | KBank internal error | |
| 07 | Payment request cannot be sent. PromptPay account is inactive. Please contact the bank of PromptPay account.(07) | |
| 35 | Payment request cannot be sent.(35) | |
| 36 | Payment request cannot be sent. The owner of PromptPay account must give consent for receiving the payment request to the bank of that account .(36) | |
| 37 | Payment request cannot be sent. The bank of PromptPay account does not support Request-to-Pay.(37) | |
| 40 | Payment request cannot be sent.(40) | |
| 41 | Payment request cannot be sent.(41) | |
| 79 | Payment request cannot be sent. Please contact the bank of PromptPay account.(79) | |
| 82 | Payment request cannot be sent. Please contact the bank of PromptPay account.(82) | |
| 96 | Payment request cannot be sent.(96) | |
| 8018 | Payment request cannot be sent.(8018) | |
| 8019 | Payment request cannot be sent.(8019) | |
| 8020 | Payment request cannot be sent.(8020) | |
| 8021 | Payment request cannot be sent.(8021) | |
| 8022 | Payment request cannot be sent.(8022) | |

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|------|--|
| 8023 | Payment request cannot be sent.(8023) |
| 8024 | Payment request cannot be sent. Please check PromptPay registration process.(8024) |
| 8025 | Payment request cannot be sent. Please check PromptPay registration process.(8025) |
| 8026 | Payment request cannot be sent. Please check PromptPay registration process.(8026) |
| 8027 | Payment request cannot be sent. Please check PromptPay registration process.(8027) |

KTB_IB_U

| Error Code | Error Description |
|------------|--|
| 11 | Cancel Payment by Customer |
| E01 | Login |
| E02 | Payment |
| Z01 | Error caused by embedding portal |
| E0111 | Your user ID / ATM Card No. is invalid. Please re-enter it. |
| E0112 | Password/PIN is invalid. Please re-enter it. In case of error exceeding three times, please contact your Main Account branch. |
| E0113 | Sorry !! Your login retries exceeded those allowed by system. Please contact branch where you signed up for service |
| E0115 | Sorry !! Your User ID/Password retries already exceeded those allowed by system. Please contact branch where you signed |
| E0116 | Sorry !! System not allow you to do transaction since you are blocked from using service. Please contact branch where you signed up for service. |
| E0117 | Sorry !! Your membership record for using KTB Internet Banking not found. Please sign up for service before login. |
| E0120 | Incorrect Company Information. |
| E0121 | Cancel Payment by Customer. |
| E0122 | Please kindly change your password at KTB Online on web before making this transaction |
| E0123 | Please pay by your belonging ATM Card or Invalid ATM Card No. |
| E0124 | You have no last 5 transactions in 30 days |
| E0212 | Insufficient funds. Please check your A/C balance. |
| E0214 | Sorry !! Host computer unavailable now. Please Login again later. |
| E0215 | Sorry !! System error - unable to serve you now. Please Login again later. |

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|-------|---|
| E0216 | Sorry !! You are not allowed to do this transaction. |
| E0217 | Sorry !! you are not allowed to do transaction since you account has problems. Please contact branch where you signed up for service. |
| E0218 | You are not allowed to do transaction because of invalid/incorrect amount. Please re-enter correct amount and redo transaction. |
| E0219 | Requested transaction date is not same as Effective Date in eMCI |
| E0220 | Your Password/PIN was invalid. Please re-enter it. If invalid more than 3 times, please contact your Main Account branch. |
| E0256 | Sorry!! An exception while processing your request. In case of financial transaction, please checking your statement |
| E0257 | Sorry !! Company or Company Account not found in CBS. Please contact KTB contact center. |
| E0258 | Please pay with your student ATM card |
| E0259 | Sorry! User is not Authorize for this action. |
| E0260 | There is no applicable account to perform this transaction. |
| E0261 | Please Login KTB Online to change your User ID and Password before payment. |
| E0262 | User is not registered mobile number for receive TOP |
| E0263 | Incorrect TOP or TOP expired Please enter correct TOP or request new TOP/ |
| E0264 | Invalid Mobile Number or Email Address. Please enter a valid mobile number or Email address |
| E0265 | Sorry! The Bank Limit Amount Exceeded |
| E0266 | Invalid Payment Reference |
| E0267 | Transaction could not be processed. |
| E0268 | Transaction is not found. |
| E0269 | Transaction failed, please contact bank. |
| Z0101 | Sorry !! Internal system in error, unable to serve you now. Please login again later. |
| Z0102 | Format message to host failed, unable to process. |
| Z0105 | Password entered was invalid. Please re-enter it. |
| Z0106 | Account number was invalid. Please re-enter it |
| Z0110 | Sorry !! Internet Banking Host currently unable to handle transaction. Please try again later. |
| Z0111 | Sorry !! Currently host time out because of so many users thus slowing down host response. Please try again later. |
| Z0117 | Invalid amount entered. Please reenter information. |
| Z0123 | Date input length exceeded that specified. Please check it again. |
| Z0127 | Data entered incomplete. Please check it again |

| | |
|-------|--|
| Z0135 | Sorry !! You already login to system and not allowed to login again since your User ID is be utilized. In case of doubt, please re-check it. |
| Z0137 | Invalid Input field. Please check it again |
| Z0161 | Invalid Configuration File setting. |
| Z0163 | Session Timed out. Please logout and login again. |
| Z0164 | Invalid Session. |
| Z0165 | Cannot format the response page. |
| Z0166 | Sorry !! Server down unable to serve you now. Please try again later. |
| Z0190 | Invalid Terminal ID or Sequence No. |
| Z0191 | Invalid Reference No. |
| Z0192 | Invalid site name. |
| Z0199 | Unknown Error Code, please check. |

SCB_IB_U

| Status | Response Code | Response Message |
|--------|---------------|----------------------------------|
| 001* | 280 | Schedule Success |
| 001* | 282 | Schedule Partially Success |
| 002 | 001 | Payment Success |
| 003 | 022 | INSUFFICIENT AVAILABLE BALANCE |
| 003 | 023 | ACCOUNT DOES NOT EXIST |
| 005 | 141 | Payment canceled by payer |
| 006 | 001 | Invalid Command |
| 006 | 011 | Terminal id is Required |
| 006 | 012 | Invalid Ref. Number or Ref. Date |
| 006 | 032 | Internal Error |
| 006 | 098 | Invalid Parameter (payee_id) |
| 006 | 098 | Invalid Parameter (cust_id) |
| 006 | 098 | Invalid Parameter (ref_no) |
| 006 | 098 | Invalid Parameter (currency) |
| 006 | 099 | Internal Error |
| 006 | 122 | Internal Error |

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|------|-----|--|
| 006 | 123 | Internal Error |
| 006 | 131 | Signon Fail |
| 006 | 136 | Invalid currency code |
| 006 | 137 | Invalid debit amount |
| 006 | 138 | Invalid profile ID |
| 006 | 139 | Internal Error |
| 006 | 140 | Duplicate Transaction |
| 006* | 35 | Duedate is required |
| 006* | 135 | Invalid Duedate(YYYYMMDD) |
| 006* | 281 | Schedule failed. Please try again. |
| 006* | 283 | Transaction failed |
| 009* | 284 | Edit Schedule date |
| 009* | 285 | Cancel Schedule transaction |
| 010 | 145 | Payment result questionable (time out) |

Note : * for Future/Recurring use only.

ShopeePay

| Value | Description |
|-------|--|
| -2 | A server dropped the connection |
| -1 | A server error occurred |
| 0 | Success |
| 1 | Request parameters error |
| 2 | Permission denied |
| 4 | Merchant/store not found |
| 6 | The user making the payment has not activated their wallet |
| 7 | Expired |
| 9 | User's account is banned |
| 11 | Duplicate request/transaction |
| 24 | User's account is frozen |
| 42 | Insufficient balance |

| | |
|-----|--|
| 101 | One of the user's wallet limits has been exceeded |
| 102 | One of the user's wallet limits has been exceeded |
| 103 | User exceeded daily payment limit Limit will reset the next day |
| 104 | One of the user's wallet limits has been exceeded |
| 105 | Authorisation code is invalid |
| 121 | Client attempts to update completed transaction |
| 301 | Invalid payment code or QR content |
| 303 | Merchant is trying to make payment to their own user account |
| 304 | Refund/void cannot be processed due to payment exceeding validity period |
| 305 | Merchant invalid |
| 601 | Request to refund/void a payment transaction does not meet rules |
| 602 | Request to refund/void a payment transaction is unsuccessful |

DuitNow OBW

| Code | Description | Status Code |
|------|--|-------------|
| U000 | Success/ Transaction Accepted | ACSP |
| U002 | Success/ Transaction Accepted Stored in SAF | ACTC |
| U110 | Payment Not Accepted | RJCT |
| U111 | Minimum Amount Check Failed | RJCT |
| U112 | Maximum Amount Check Failed | RJCT |
| U115 | Date Sent Tolerance Check failed | RJCT |
| U119 | Session Validation Failed | RJCT |
| U121 | Inbound Bank Not Found | RJCT |
| U122 | Inbound Bank Not Active | RJCT |
| U124 | Bank Code Not found in message | RJCT |
| U125 | Inbound Bank Id Cannot be Determined (Bank Classifier not found) | RJCT |
| U126 | Outbound Bank Cannot be Determined | RJCT |
| U128 | Outbound Bank Not Active | RJCT |

| U130 | Inbound Settlement Bank not found | RJCT |
|-------------------|---|------|
| U131 | Outbound Settlement Bank not found | RJCT |
| U132 | Inbound Settlement Bank Inactive | RJCT |
| U134 | Outbound Settlement Bank Inactive | RJCT |
| U149 | Duplicate Transaction | RJCT |
| DuitNow QR | | |
| Value | Description | |
| 12 | Invalid transaction / Transaction not allowed | |
| 13 | Unable to Credit due to invalid amount | |
| 46 | QR validation failed | |
| 47 | Invalid source of funds | |
| 48 | QR has expired | |
| 52 | Unable to Credit due to account does not exist or invalid account | |
| 94 | Duplicate Transmission | |
| N3 | Unable to Credit due to account does not exist or invalid account | |

RESOURCES

Logos of all brand name

Merchant may download the logos from <https://Fiuu.com/media-library/>
password: RazerMerchantServices

Mobile SDK/XDK

PG is now ready to be integrated into your mobile apps. We have released the Mobile SDK and XDK library on GitHub. To apply this, kindly contact support@fiuu.com and provide your Merchant ID or Company name, Platform (iOS/Android), Apps Name in order to register and authorize 3rd party apps in the PG system.

Supported Shopping Cart

PG has been integrated with many popular shopping carts, globally. Merchant may refer the complete list on <https://github.com/FiuuPayment>
Some payment plugins/add-on/modules can be downloaded from GitHub.

ISO References

http://www.iso.org/iso/country_codes.htm
http://en.wikipedia.org/wiki/ISO_3166-1
http://www.iso.org/iso/currency_codes
http://en.wikipedia.org/wiki/ISO_4217

Handling JSON/PLAIN TEXT using .NET

<http://stackoverflow.com/questions/36216464/wcf-webinvoke-which-can-accept-content-type-text-plain>

Please use the above custom WebContentTypeMapper if you are using .NET, especially when you encounter this exception message:

The incoming message has an unexpected message format 'Raw'. The expected message formats for the operation are 'XML'; 'JSON'. This can be because a WebContentTypeMapper has not been configured on the binding. See the documentation of WebContentTypeMapper for more details.