



MOLPay (Formerly known as NBePay) Documentation
API Specification for MOLPay Integration

(Version 10.3)

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INTRODUCTION

Dealing with banks and 3rd party payment gateway suppliers 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 MOLPay Sdn Bhd proudly present **MOLPay** Secure Online Transaction service to cater your requirement.

MOLPay is a service to help merchant to sell online. The service includes a **front-end page** (for online buyer to enter their credit card information) and a **back-end merchant site** (for merchant to track their client payment status).

FQDN: www.onlinepayment.com.my (using HTTPs)

This is the URL for starting and ending point of payment process. This domain has been verified and secured by a high-grade 256-bit encryption SSL.

General information about this service could be found here:

<http://www.netbuilder.com.my/html/modules/tinycontent/index.php?id=44>

BENEFIT

- Lowest transaction rate (or discounted rate) that charged by bank
- Support variety of online payment method in Malaysia
- Easy to integrate or no integration required if using NetBuilder EC package
- Support well-known online shopping cart system
- Save time and money to have all payment channels in a box
- High-grade security assurance

* Fraud Scan will not be activated under a testing account or any non-traditional credit card payment and always return the value, or so called Fraud Score of "-1" or " - " or " n/a " for the fraud score.

Back-end admin site for merchant:

<https://www.onlinepayment.com.my/NBepay>

MerchantID and **Password** are required to logon **

This admin site allows merchant to check:

- i) Merchant profile, change **Password**, and to configure **return URL**
- ii) Transaction listing and details
- iii) Settlement listing and details

Merchant could check the multi-payment channel option in profile to display all available payment methods.

**** Both MerchantID and Password are CASE SENSITIVE**

MOLPay secure online transaction at a glance



Shopping Cart on merchant website
Select NBePay or Pay with Credit Card to checkout



NBePay payment page
Fill necessary info and proceed



Redirect to bank server

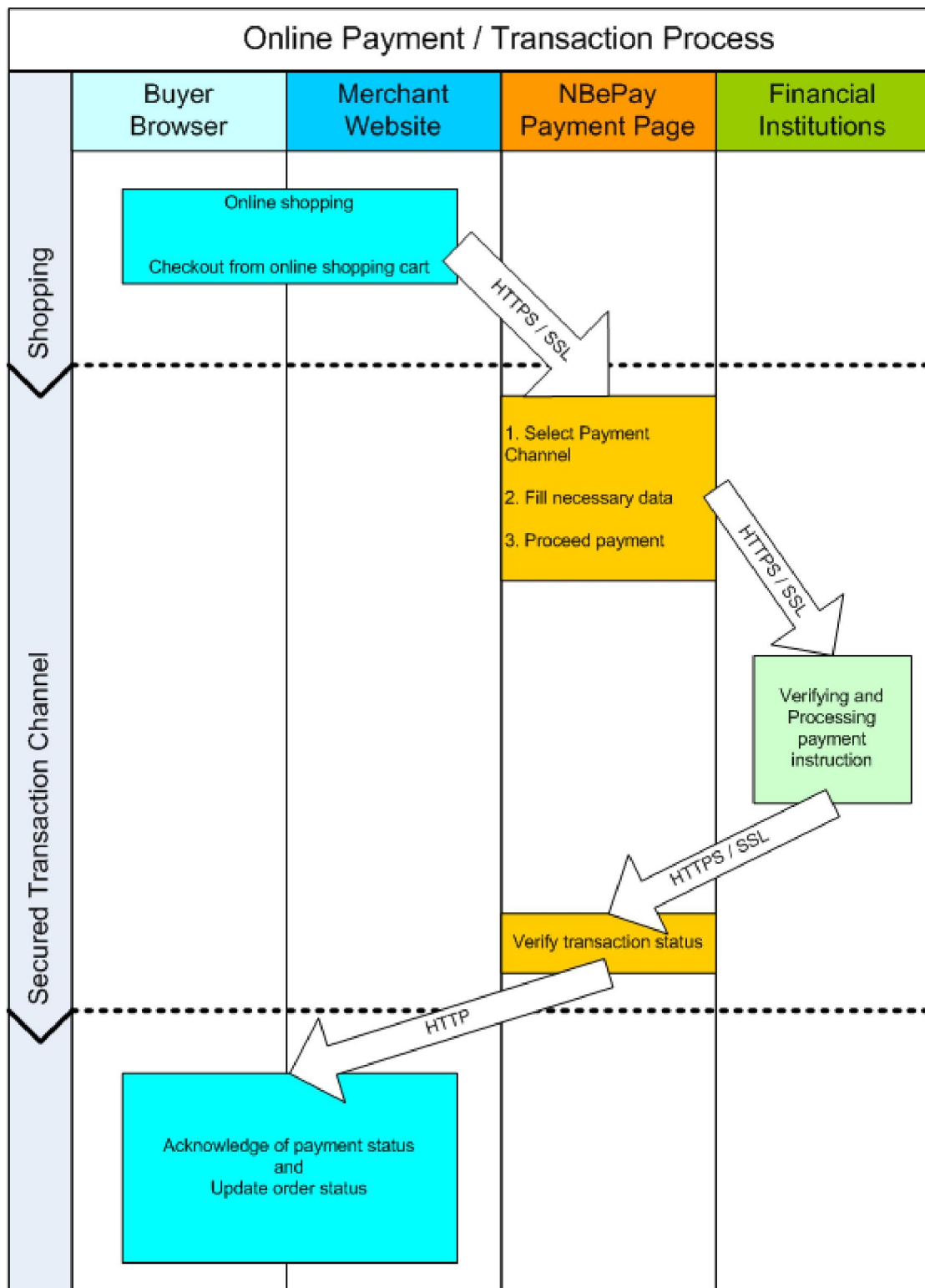


NBePay return page
Redirect to merchant website



Update order status on merchant website

Online Payment / Transaction Process



PART 1 - Malaysia Payment Gateway (Credit Card & Local Debit payment)

1. Front-end payment page URL for online buyer:

https://www.onlinepayment.com.my/NBepay/pay/MerchantID/Payment_Method

MerchantID (compulsory) is the merchant login name given by MOLPay.

This is a secured payment page for online buyer to fill their critical payment information.

Payment_Method (optional) is the identity for the gateway which will process your payment information that has been send to MOLPay.

Kindly refer to **Payment Method reference** on next page for further info.

2. Variable / parameter passing method:

POST or **GET** : to front-end URL.

POST : to **return URL**, which is filled by merchant after logon to Admin Site.

3. Parameters (required by payment page) :

Variable name	Format	Attribute	Description
amount	Floating point	Read only. Minimum is 1.00	The transaction amount in one bill. Configurable whether to lock this field.
orderid	Alpha-numeric	Compulsory and read only. Max : 32 characters	The bill / invoice number. Configurable whether to lock this field.
bill_name	Alpha-numeric		The buyer name
bill_email	Alpha-numeric		The buyer email
bill_mobile	Alpha-numeric		The buyer mobile contact number
bill_desc	Alpha-numeric		Description of the bill
country	Character	2 uppercase characters	Destination (Country) that the goods to be shipped or delivered or the buyer country. Two-letter ISO-3166 country code. * Please refer Ref 1 (page 51) for more info
cur	Lower Case Character	Optional values available are : - rm / myr - usd - ntd / twd Max : 3 characters	All transactions are in Ringgit Malaysia (RM/MYR) or US Dollar (USD) only ⁽ⁱ⁾ . Accepted currencies for auto-forex conversion are US dollar (USD), New Taiwan Dollar (TWD / NTD) ^(ii, iii, iv) * Please refer below for the info (i, ii, iii, iv).
returnurl	URL address		This URL will be used if merchant intend to use their merchant account for multiple online shops/websites. * Please refer Ref 3 (page 52) for more info
vcode	MD5 Encrypted String	Combinations of amount, Merchant ID, order ID & Verify Key.	Additional security code to avoid any changes on any value pass to MOLPay e.g : md5(\$amount.\$merchantID.\$orderId.\$verifyKey) * Kindly refer Ref 4 (page 53) for more info

Info :

- i) Kindly be informed that, transaction in US Dollar (USD) is for selected subscribers only.
- ii) The forex rate is based on MOLPay preferential rate and will be update without prior notice.
- iii) Auto-forex conversion is **NOT recommended** for those merchants who cannot take the risk of fluctuation in forex rate.
- iv) Those who opt for PayPal **MUST NOT** use RM, RMB or NTD as currency code, use MYR, CNY and TWD instead. However, most of the case, PayPal charges higher transaction rate than MOLPay does.(refer to table in Ref 2)

Payment Method Reference :

Payment Method	Identity
Credit Payment	
Visa & Mastercard (default)	index.php
Mobile Money	mobilemoney.php
Debit Payment	
Maybank2u Fund Transfer	maybank2u.php
MEPS FPX	fpx.php
CIMB Clicks	cimb.php
RHB Online	rhb.php
EON Bank Online	eon.php
Hong Leong Bank Online	hlb.php
Mepscash Online	mepscash.php
Webcash	webcash.php

Note :

* If there is no payment method defined, your payment information will be process by default payment method which is via credit payment (Visa & Mastercard).

* Merchant may tick on “**Multi-Payment Channel**” in Merchant Profile to display payment method options on front-end payment page (*refer figure below*).

Callback URL [Beta 1.0] (*)	<input type="text" value="http:// {YOUR CALLBACK URL}"/>
Multi-Payment Channel	<input checked="" type="checkbox"/> Enable (v)
Verify Key	XXXXXXXXXXXXXXXXXXXX
Enable Verify Payment	<input type="checkbox"/> Tick to enable transaction amount and order number verification (v)

Multi-Payment Channel setting in Merchant profile


Display Payment Options

Available Payment Methods:

- ☐ VISA MasterCard
- ☐ MEPS FFX
- ☐ EON BANK
- ☐ Many thanks 2u.com
- ☐ Hong Leong Bank
- ☐ CIMB Clicks
- ☐ RHB Now Internet & Mobile Banking
- ☐ MOBILE MONEY
- ☐ MEPS CASH
- ☐ WEB CASH
- ☐ China Online Banking
- ☐ Alipay.com

Change Payment Option

Hide



MOLPay
Buy Everywhere, Pay Anywhere
MOLPay Demo

8-13-14, Jalan Mahkota Tower,
Cyberjaya, 47630,
47630 Cyberjaya, Selangor, Malaysia
Tel: 03-12 8430 Fax: 03-12 8437
URL: www.molpay.com Email: info@molpay.com

SECURE ONLINE PAYMENT

APPOINTED PAYMENT GATEWAY: **NetBanking (B) Sdn Bhd**

This transaction will appear as **NetBanking B** on your credit card billing statement
Refund: A REFUND will be sent to you 14 days after this transaction date.

AMOUNT: 100.00
ORDER ID: 00111
CARD TYPE: VISA
CARD NUMBER: (14 digits)
CVV: (the last 3 digits at the back of your credit card)
EXPIRY DATE: 1 - 2012
NAME OF CARDHOLDER:
EMAIL:
CONTACT NO.:
COUNTRY: MALAYSIA
BILLING COUNTRY: MALAYSIA
BILLING NAME:
BILLING PHONE:
BILLING POSTCODE: Pending by MP

Payment Method options on Merchant payment page

4. Integration example:

i) Via **GET** method

Simple HTML hyperlink (all the below in one line)

```
<a href="https://www.onlinepayment.com.my/NBepay/pay/ACME/?amount=12.99&
orderid=DG873&bill_name=Mr+Albert+Lim&bill_email=hosting%40netbuilder.com.my&
bill_mobile=016-2341234&bill_desc=DIGI+Reload+Coupon+RM30&cur=rm&
country=MY&returnurl=http://www.domain.com.my/multiReturnUrl.php&vcode=12616gwhqs73746jhsd78">
Pay Here </a>
```

For ASP / ASP.NET developer:

```
<%
dim amount, orderid, name, email, mobile, desc, country, cur
amount="12.99"
orderid="DG873"
name="Mr Albert Lim"
email="hosting@netbuilder.com.my"
mobile="016-2341234"
desc="DIGI Reload Coupon RM30"
cur = "rm"
country="MY"
returnurl="http://www.domain.com.my/multiReturnUrl.php"
vcode = md5(amount & merchantID & orderid & xxxxxxxx )

response.write("<a href='https://www.onlinepayment.com.my/NBepay/pay/test99/?'")
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("&cur=" & cur)
response.write("&country=" & country)
response.write("&returnurl=" & returnurl)
response.write("&vcode=" & vcode)
response.write("> Pay Here </a>")
%>
```

For PHP developer:

```
<?PHP
echo "<a href=https://www.onlinepayment.com.my/NBepay/pay/test99/?";
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 "cur=".urlencode($cur)."&";
echo "returnurl=".$returnurl."&";
echo "vcode=".$vcode."&";
echo "country=$country> Pay Here </a>";
?>
```

- * Transaction amount must be greater than RM1.00
- * Replace xxxxxxxx with your MOLPay Verify Key

ii) Via **POST** method

Simple HTML form.

For ASP / ASP.NET developer:

```
<%
dim amount, orderid, name, email, mobile, desc, country, cur
amount="12.99"
orderid="DG873"
name="Mr Albert Lim"
email="hosting@netbuilder.com.my"
mobile="016-2341234"
desc="DIGI Reload Coupon RM30"
cur = "rm"
country="MY"
returnurl="http://www.domain.com.my/multiReturnUrl.php"
vcode = md5(amount & merchantID & orderid & xxxxxxxx )

response.write("<form action='https://www.onlinepayment.com.my/NBepay/pay/test99/' method=POST >")
response.write("<input type=hidden      name=amount      value=" & amount & ">")
response.write("<input type=hidden      name=orderid      value=" & oid & ">")
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=cur          value=" & cur & ">")
response.write("<input type=hidden      name=returnurl    value=" & returnurl & ">")
response.write("<input type=hidden      name=vcode        value=" & vcode & ">")
response.write("<input type=hidden      name=country      value=" & country & ">")
response.write("<input type=submit      value='PAY HERE' ">")
response.write("</form>")
%>
```



For PHP developer:

```
<?PHP
echo "<form action='https://www.onlinepayment.com.my/NBepay/pay/test99/' 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=cur         value=$cur>";
echo "<input type=hidden      name=returnurl    value=$returnurl>";
echo "<input type=hidden      name=vcode       value=$vcode>";
echo "<input type=hidden      name=country     value=$country>";
echo "<input type=submit      value='PAY HERE'>";
echo "</form>";
?>
```

5. Return URL:

Default is http://mymall.netbuilder.com.my/onlinepayment/nbepay_return.php (for MyMall merchant), merchant can specify their own **return URL** at the merchant profile, variables will be submitted to the **return URL** by POST method (All these value were returned by MOLPay)

6. Return Parameters (by POST method)

Variable name	Format	Attribute	Description
amount *	Floating point		The transaction amount in one bill.
orderid	Alpha-numeric		The bill / invoice number
appcode *	Alpha-numeric		Bank approval code
tranID	Numeric		Transaction ID for tracking purpose
domain	Alpha-numeric		Merchant ID
status	Numeric	00 ,11 or 22**	Status of transaction: 00 is success 11 is failure 22 is pending**
currency	Character		RM
paydate	Date / Time	YYYY-MM-DD HH:mm:ss	Date and time of the transaction
channel	Character		Depends to payment method. Please refer Return Channel Reference below for more info.
skey *	Alpha-numeric	MD5 encryption	Encrypted string to verify whether the transaction is from a valid source. Verify Key is required.

* For test account, when transaction is failure, no value returns for this field.

** Applied for FPX transaction only and will be return to merchant's Timeout URL once merchant activated "FPX Asynchronous Payment" feature in merchant profile (**Please refer Ref 5, page 55 for further details**)

Return channel Reference :

Payment Method	Return Channel
Credit Payment	
Visa & Mastercard (default)	Credit
Mobile Money	MM-Weblink
Debit Payment	
Maybank2u Fund Transfer	MB2u
MEPS FPX	FPX
CIMB Clicks	CIMB-Clicks
RHB Online	RHB-ONL
EON Bank Online	EON-DirectDebit
Hong Leong Bank Online	HLB-ONL
Mepscash Online	MEPSCash
Webcash	WEBCASH

7. Example of a return script

Example for PHP Developer

```
<?PHP
$keykey          ="xxxxxxx";

//----- below don't change -----
$tranID          =$_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['skey'];

// All undeclared variables below are coming from POST method
$key0            = md5( $tranID.$orderid.$status.$domain.$amount.$currency );
$key1            = md5( $paydate.$domain.$key0.$appcode.$key );
if( $key != $key1 ) $status= -1; // invalid transaction
//-----

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 .....
}

?>
```

* Replace xxxxxxxx with your MOLPay Verify Key

Example for **ASP/ASP.NET** Developer

```
<!--#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 MOLPay support team
' Some variables below are coming from POST method

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

tranID      = Request.Form("tranID")
orderid     = Request.Form("orderid")
status      = Request.Form("status")
domain      = 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 & domain & key0 & appcode & "xxxxxx" )

' invalid transaction if the key is different
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
End if

%>
```

* Replace xxxxxxxx with your MOLPay Verify Key

IMPORTANT NOTICE

** Multiple md5 encryption is used to verify the secret key (skey) to avoid faked transaction from 3rd party. Please keep the Verify Key and encryption method as a secret to protect your E-commerce website.*



8. Testing account only verifies VISA and MasterCard number validity and **NO** actual transaction occurs between bank or payment gateway. VISA and MasterCard card number for testing:

Pattern	MasterCard	VISA
Positive Test	5105105105105100 5555555555554444	4111111111111111 4012888888881881
Negative Test	5555555555554440	4111111111111110

9. MOLPay do not provide any testing account for others payment method (except for Credit payment : Visa & Mastercard only). Merchant needs to register own **Internet Banking Account** to do the testing.

However, merchant may use demo merchant account* below to have a look on MOLPay secure payment page & the rest of the payment options available on MOLPay.

MerchantID : molpaydemo

Front-end payment page URL :

<https://www.onlinepayment.com.my/NBepay/pay/molpaydemo/index.php>

* Merchant not allowed to perform real transaction for this demo merchant account (molpaydemo) because **no refund & settlement will be made for this demo merchant account.**

PART 2 – China online banking (Debit Payment in RMB)

** An option for selective subscriber only*

IMPORTANT NOTICE

This is a foreign currency payment channel and the currency in actual transaction is China Renminbi (RMB / CNY)

This channel is now connecting to more than 20 China local banks directly and supporting more than 40 debit cards. It covers more than 98% of your target customers in mainland China.

1. Front-end URL:

<https://www.onlinepayment.com.my/NBepay/pay/MerchantID/paymentasia.php>

2. Variable / parameter passing method:

POST or **GET** : to front-end URL.

POST : to **return URL**, which is filled by merchant after logon to Admin Site.

3. Parameters:

Variable name	Format	Attribute	Description
amount	Floating point	Read only. Minimum is 1.00	The transaction amount in one bill. Currency passing in is Ringgit Malaysia (MYR), Renminbi (RMB) or Chinese Yuan (CNY).
orderid	Alpha-numeric	Compulsory and read only Max : 32 characters	The bill / invoice number
bill_name	Alpha-numeric		The buyer name * UTF-8 encoding is recommended for Chinese contents
bill_email	Alpha-numeric		The buyer email
bill_mobile	Alpha-numeric		The buyer mobile contact number
cur	Character	Optional; values available are : - rmb / cny - rm / myr - ntd / twd - usd Max : 3 characters	All transactions are in Chinese Renminbi (RMB / CNY) only. Accepted currencies for auto-forex conversion are US dollar (USD), Malaysian Ringgit (RM / MYR), New Taiwan Dollar (TWD / NTD). (i, ii) * Please refer below for the info (i, ii)
bill_desc	Alpha-numeric		Description of the bill * UTF-8 encoding is recommended for Chinese contents
returnurl	URL Address		This URL will be used if merchant intend to use their merchant account for multiple online shops/websites. * Please refer Ref 3 (page 52) for more info
vcode	MD5 Encrypted String	Combinations of amount, Merchant ID, order ID & Verify Key.	Additional security code to avoid any changes on any value pass to MOLPay e.g : md5(\$amount.\$merchantID.\$orderId.\$verifyKey) * Kindly refer Ref 4 (page 53) for more info

4. Integration example (via GET method):

```
<?PHP
echo "<a href=https://www.onlinepayment.com.my/NBepay/pay/test99/paymentasia.php?";
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 "cur=".urlencode($cur)."&";
echo "returnurl=".$returnurl."&";
echo "vcode=".$vcode."&";
echo "country=$country> Pay via China Online Bank </a>";
?>
```

* Transaction amount must be greater than (CUR) 1.00
(CUR) refer to MYR or RMB

Info :

- i) The forex rate is based on MOLPay preferential rate and will be update without prior notice.
- ii) Auto-forex conversion is NOT recommended for those merchants who cannot take the risk of fluctuation in forex rate.

5. Return URL:

Default is http://mymall.netbuilder.com.my/onlinepayment/nbepay_return.php (for MyMall merchant), merchant can specify their own **return URL** at the merchant profile, variables will be submitted to the **return URL** by POST method.

6. Return Parameters (by POST method)

Variable name	Format	Attribute	Description
amount	Floating point		The transaction amount in one bill.
orderid	Alpha-numeric		The bill / invoice number
appcode	Alpha-numeric		Bank approval code
tranID	Numeric		Transaction ID for tracking purpose
domain	Alpha-numeric		Merchant ID
status	Numeric	00 or 11	Status of transaction, 00 is success and 11 is failure
currency	Character	2 uppercase characters	Always "RM"
paydate	Date / Time	YYYY-MM-DD HH:mm:ss	Date and time of the transaction
channel	Character		PM-ASIA
key	Alpha-numeric	MD5 encryption	Encrypted string to verify whether the transaction is from a valid source. Verify Key is required.

7. Example of a return script (PHP)

```
<?PHP
$vkey          ="xxxxxx";

//----- below don't change -----
$tranID        =$_POST['tranID'];
$orderid       =$_POST['orderid'];
$status        =$_POST['status'];
$domain        =$_POST['domain'];
$amount        =$_POST['amount'];
$currency      =$_POST['currency'];
$appcode       =$_POST['appcode'];
$paydate       =$_POST['paydate'];
$skey          =$_POST['skey'];

// All undeclared variables below are coming from POST method
$key0          = md5( $tranID.$orderid.$status.$domain.$amount.$currency );
$key1          = md5( $paydate.$domain.$key0.$appcode.$vkey );
if( $skey != $key1 ) $status= -1; // invalid transaction
//-----

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 .....
}

?>
```

* Replace xxxxxxxx with your MOLPay Verify Key

IMPORTANT NOTICE

* Multiple md5 encryption is used to verify the secret key (skey) to avoid faked transaction from 3rd party. Please keep the Verify Key and encryption method as a secret to protect your E-commerce website.

8. Testing account: MOLPay does not provide any test account for this payment option. Merchant needs to have own **any of supported bank online account** to do testing.

PART 3 – Alipay (The largest China online payment service provider)

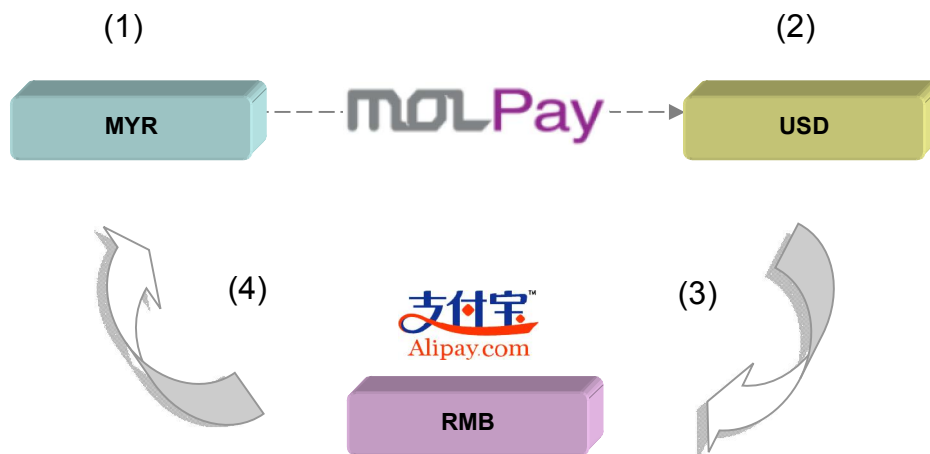
** An option for selective subscriber only*

IMPORTANT NOTICE

All currencies will be changed to USD on this page and will be recorded in MOLPay database once submitted to AliPay payment gateway. At AliPay payment gateway, USD will then be converted and transacted in RMB.

Alipay is committed to providing payment services with “*simple, secure and speedy*” solutions to China’s e-business. Through their strategic cooperation with domestic commercial bank, merchants have gained access to a broad online consumer market in mainland China.

Refer figure below for the currency flow of Alipay channel on MOLPay



Details :

- 1) Merchant sends or stores amount in MYR.
- 2) MOLPay will convert amount from MYR to USD.
- 3) Alipay converts amount in USD to RMB.
- 4) When return to MOLPay, it will return MYR to merchant store.

1. Front-end URL:

<https://www.onlinepayment.com.my/NBepay/pay/MerchantID/alipay.php>

2. Variable / parameter passing method:

POST or **GET** : to front-end URL.

POST : to **return URL**, which is filled by merchant after logon to Admin Site.

3. Parameters:

Variable name	Format	Attribute	Description
amount	Floating point	Read only. Minimum is 1.00	The transaction amount in one bill. Currency passing in is Ringgit Malaysia (MYR), US Dollar (USD), or New Taiwan Dollar (NTD). Currency passing in will be converted to USD. RMB conversion will be done by Alipay.
orderid	Alpha-numeric	Compulsory and read only Max : 32 characters	The bill / invoice number
bill_name	Alpha-numeric		The buyer name * UTF-8 encoding is recommended for Chinese contents
bill_email	Alpha-numeric		The buyer email
bill_mobile	Alpha-numeric		The buyer mobile contact number
cur	Character	Optional; values available are : - rm / myr - ntd / twd - usd Max : 3 characters	Accepted currencies for auto-forex conversion are US dollar (USD), New Taiwan Dollar (TWD / NTD) (i, ii) * Please refer below for the info (i, ii)
bill_desc	Alpha-numeric		Description of the bill * UTF-8 encoding is recommended for Chinese contents
returnurl	URL Address		This URL will be used if merchant intend to use their merchant account for multiple online shops/websites. * Please refer Ref 3 (page 52) for more info
vcode	MD5 Encrypted String	Combinations of amount, Merchant ID, order ID & Verify Key.	Additional security code to avoid any changing on any value pass to MOLPay e.g : md5(\$amount.\$merchantID.\$orderId.\$verifyKey) * Kindly refer Ref 4 (page 53) for more info

4. Integration example (via GET method) :

```
<?PHP
echo "<a href=https://www.onlinepayment.com.my/NBepay/pay/test99/alipay.php?";
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 "cur=".urlencode($cur)."&";
echo "returnurl=".$returnurl."&";
echo "vcode=".$vcode."&";
echo "country=$country> Pay via Alipay </a>";
?>
```

* Transaction amount must be greater than (CUR) 1.00
(CUR) refer to MYR or USD

Info :

- i) The forex rate is based on MOLPay preferential rate and will be update without prior notice.
- ii) Auto-forex conversion is NOT recommended for those merchants who cannot take the risk of fluctuation in forex rate.

5. Return URL:

Default is http://mymall.netbuilder.com.my/onlinepayment/nbepay_return.php (for MyMall merchant), merchant can specify their own **return URL** at the merchant profile, variables will be submitted to the **return URL** by POST method.

6. Return Parameters (by POST method)

Variable name	Format	Attribute	Description
amount	Floating point		The transaction amount in one bill.
orderid	Alpha-numeric		The bill / invoice number
appcode	Alpha-numeric		Bank approval code
tranID	Numeric		Transaction ID for tracking purpose
domain	Alpha-numeric		Merchant ID
status	Numeric	00 or 11	Status of transaction, 00 is success and 11 is failure
currency	Character	2 uppercase characters	Always "RM"
paydate	Date / Time	YYYY-MM-DD HH:mm:ss	Date and time of the transaction
channel	Character		Alipay
skey	Alpha-numeric	MD5 encryption	Encrypted string to verify whether the transaction is from a valid source. Verify Key is required.

7. Example of a return script (PHP)

```
<?PHP
$keykey          ="xxxxxxx";

//----- below don't change -----
$tranID          =$_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['skey'];

// All undeclared variables below are coming from POST method
$key0            = md5( $tranID.$orderid.$status.$domain.$amount.$currency );
$key1           = md5( $paydate.$domain.$key0.$appcode.$key );
if( $key != $key1 ) $status= -1; // invalid transaction
//-----

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 .....
}

?>
```

* Replace xxxxxxxx with your MOLPay Verify Key

IMPORTANT NOTICE

** Multiple md5 encryption is used to verify the secret key (skey) to avoid faked transaction from 3rd party. Please keep the Verify Key and encryption method as a secret to protect your E-commerce website.*

8. Testing account: MOLPay does not provide any test account for this payment option. Merchant needs to have own **any of supported bank online account** to do testing.



PART 4 – MOLPay PayPal ExpressCheckout.

** An option for selective subscriber only*

IMPORTANT NOTICE

- 1) *This is a multiple currencies payment channel and accepts more than one currency to do a transaction.*
- 2) *No auto-forex conversion occurs on MOLPay PayPal channel as this is a multi-currency transaction platform.*

MOLPay PayPal ExpressCheckout suitable for merchant to well managed their online business transaction secure and safely.

For this channel, we are glad to inform our merchant that we **accept multiple currencies** to do a transaction. Using this channel, merchant able to use U.S Dollar as a default currency or choose any other currency available from the list of PayPal accepted currencies. For this, please refer to page 51 (*Ref 2*) to view the list of currency code available for this channel.

These are the steps to activate this channel with MOLPay :

- i) Sign up for Paypal account.
- ii) Grant 3rd party API access
- iii) Configure PayPal on MOLPay merchant account.
- iv) Integrate your website with MOLPay.

i) Sign up PayPal account.

- Go to <https://www.paypal.com/row/mrb/pal=QZWR4MCTKC9PS> and sign up your own PayPal Business account.

ii) Grant 3rd party API access

- Login to your PayPal account <https://www.paypal.com/>
- Under your PayPal account, click on **Profile** tab. (Figure 1)



Figure 1

- From **My selling tools** menu, choose API Access to manage API credentials on your PayPal account (Figure 2)

My Profile

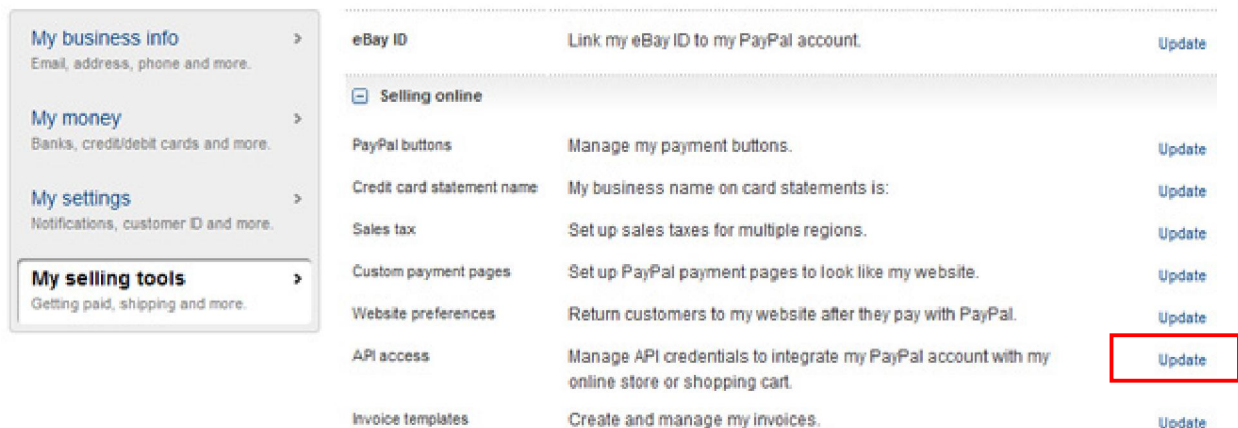


Figure 2

- Select **Grant API Permission Add** for 1st time user or **edit API permissions** if you have done API permission on your PayPal account previously. (Figure 3)

API Access [Back to My Profile](#)

An API (Application Programming Interface) allows PayPal software to communicate with your online store or shopping cart.

Setting up API permissions and credentials

Choose one of the following options to integrate your PayPal payment solution with your online store or shopping cart.

Option 1 - Add or edit API permissions to view your current API settings, change your settings, or set up additional carts or online stores.

This option applies to:

- Hosted online stores and shopping carts integrated with PayPal
- Websites hosted and managed by third-party service providers

[Add or edit API permissions](#)

Option 2 - Request API credentials to create your own API username and password.

This option applies to:

- Custom websites and online stores
- Pre-integrated shopping carts running on your own server

[Request API credentials](#)

Figure 3

- Put info_api1.netbuilder.com.my on API Account Username and click on **Express Checkout** for API Access Level. (Figure 4)

Give Third-Party API Permission

Authorize a third-party to make API calls on your behalf.

See the [Third-Party API Instructions](#) for help completing this page. Learn more about API permissions on the [PayPal API Concepts and Terminology](#) page.

Enter API account username [What is this?](#)

Select Your API Access Level

☐ Direct Payment

☒ Express Checkout

☐ Reporting and Backoffice APIs

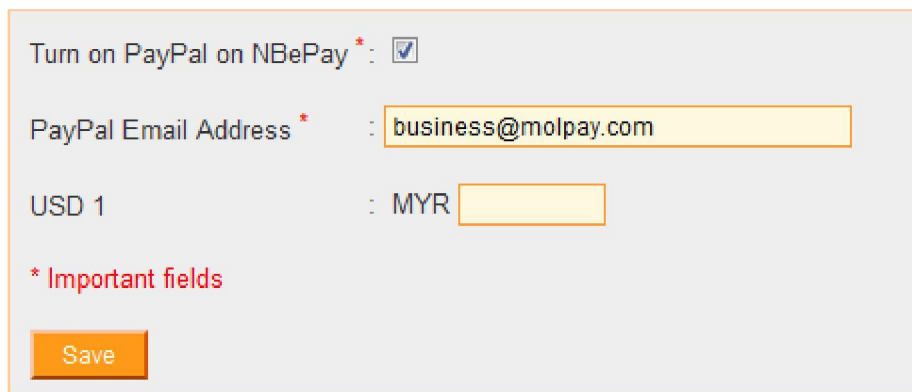
☐ Authorization and Settlement APIs

[Configure a custom API authorization.](#)

Figure 4

iii) Configure PayPal on MOLPay merchant account.

- Go to PayPal section on your MOLPay merchant account by clicking on PayPal logo in transaction listing page.
- Click on the checkbox to turn on PayPal ExpressCheckout channel on MOLPay.
- Provide email you use to register PayPal Business account.
- Save all the changes. (Figure 5)



Turn on PayPal on NBePay * : ☒

PayPal Email Address * :

USD 1 : MYR

* Important fields

Figure 5

iv) Integrate your website with MOLPay.

1. Front-end payment page URL for online buyer:
<https://www.onlinepayment.com.my/NBepay/pay/MerchantID/paypal.php>
2. Variable / parameter passing method:
POST or **GET** : to front-end URL.
POST : to **return URL**, which is filled by merchant after login to Admin Site.
3. Parameters (required by payment page) :

Variable name	Format	Attribute	Description
amount	Floating point	Read only. Minimum is CUR 1.00	The transaction amount in one bill. Configurable whether to lock this field. * CUR is the currency code passing from merchant website
orderid	Alpha-numeric	Compulsory and read only Max : 32 characters	The bill / invoice number. Configurable whether to lock this field.
bill_name	Alpha-numeric		The buyer name
bill_email	Alpha-numeric		The buyer email
bill_mobile	Alpha-numeric		The buyer mobile contact number
bill_desc	Alpha-numeric		Description of the bill
country	Character	2 uppercase characters	Destination (Country) that the goods to be shipped or delivered or the buyer country. Two-letter ISO-3166 country code. * Please refer Ref 1 (page 51) for more info
cur	Character	Compulsory and the value is in 3 uppercase characters.	PayPal now accept multicurrency to do a transaction. Please refer page 50 to view list of currencies available.
returnurl	URL address		This URL will be used if merchant intend to use their merchant account for multiple online shops/websites. * Please refer Ref 3 (page 52) for more info
vcode	MD5 Encrypted String	Combinations of amount, Merchant ID, order ID & Verify Key.	Additional security code to avoid any changes on any value pass to MOLPay e.g : md5(\$amount.\$merchantID.\$orderId.\$verifyKey) * Kindly refer Ref 4 (page 53) for more info

4. Integration example:

```
<?PHP
echo "<a href=https://www.onlinepayment.com.my/NBepay/pay/test99/paypal.php?";
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 "cur=".urlencode($cur)."&"; **
echo "returnurl=".$returnurl."&";
echo "vcode=".$vcode."&";
echo "country=$country> Pay via MOLPay PayPal ExpressCheckout </a>";
?>
```

- * Transaction amount must be greater than **CUR 1.00** (**CUR** Is the currency use to make a transaction)
- ** This value is compulsory and the currency value is depends on default currency on your website.

5. Return URL:

Default is http://mymall.netbuilder.com.my/onlinepayment/nbepay_return.php (for MyMall merchant), merchant can specify their own **return URL** at the merchant profile, variables will be submitted to the **return URL** by POST method.

6. Return Parameters (by POST method)

Variable name	Format	Attribute	Description
amount	Floating point		The transaction amount in one bill.
orderid	Alpha-numeric		The bill / invoice number
appcode	Alpha-numeric		Bank approval code
tranID	Numeric		Transaction ID for tracking purpose
domain	Alpha-numeric		Merchant ID
status	Numeric	00 or 11	Status of transaction, 00 is success and 11 is failure
currency	Character	3 uppercase characters	Depends on currency code return by PayPal
paydate	Date / Time	YYYY-MM-DD HH:mm:ss	Date and time of the transaction
channel	Character		PayPal
skey	Alpha-numeric	MD5 encryption	Encrypted string to verify whether the transaction is from a valid source. Verify Key is required.

7. Example of return script (PHP)

```
<?PHP
$keykey          ="xxxxxxx";

//----- below don't change -----
$tranID          =$ _POST['tranID'];
$orderid         =$ _POST['orderid'];
$status          =$ _POST['status'];
$domain          =$ _POST['domain'];
$amount          =$ _POST['amount'];
$currency        =$ _POST['currency'];
$appcode         =$ _POST['appcode'];
$paydate         =$ _POST['paydate'];
$skey            =$ _POST['skey'];

// All undeclared variables below are coming from POST method
$key0            = md5( $tranID.$orderid.$status.$domain.$amount.$currency );
$key1            = md5( $paydate.$domain.$key0.$appcode.$vkey );
if( $skey != $key1 ) $status= -1; // invalid transaction
//-----

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 .....
}

?>
```

* Replace xxxxxxxx with your MOLPay Verify Key

IMPORTANT NOTICE

** Multiple md5 encryption is used to verify the secret key (skey) to avoid faked transaction from 3rd party. Please keep the Verify Key and encryption method as a secret to protect your E-commerce website.*

8. Testing account: MOLPay does not provide any test account for this payment option. Merchant needs to have own **PayPal account** to do testing.



PAYMENT STATUS QUERY

Payment status query are Merchant initiated process, which means query sent from merchant's system to MOLPay to get updated payment status of any transaction either it has complete the payment loop (returned to merchant site) or not.

There have 2 types of status query available under MOLPay. Which is query by :

- a) **Transaction ID** – Unique transaction ID are compulsory to check transaction status for this option. MOLPay will return single unique result based on transaction ID given.
- b) **Order ID** – require order ID (might be not unique) to check transaction status and there have 2 types of query available under this option :
 - 1. Single result - This query will return the latest matched result of transaction status.
 - 2. Batch result :
 - i) Single input - This query will return batch/group result (if available) for single order ID provided.
 - ii) Batch input – This query will return the latest matched result of transaction status for batch/group of info (either Order ID or Transaction ID) provided.

IMPORTANT NOTICE

1) Merchant is only allowed to query **ONCE FOR EVERY 5 MINUTES** or the system will block merchant's IP/query source automatically.

2) Kindly be informed that this feature is not available for MOLPay test account.

Part A : Payment Status Query using Transaction ID

1. Front-end URL: https://www.onlinepayment.com.my/NBepay/q_by_tid.php

2. Parameters via **GET** or **POST** method (the variable name and value are case sensitive):

Variable name	Format	Attribute	Description
amount	Floating point	Compulsory. Minimum is 1.00	The transaction amount in one bill.
txID	Integer	Compulsory	Unique transaction id
domain	Alpha-numeric	Compulsory	Merchant ID
type	Integer	Optional	Method for merchant to receive return data : 0 – in plain text (default) 1 – in POST
url	URL Address	Compulsory if value of type=1	URL to receive return data. <i>*Kindly be informed, data will be returned to merchant's system via background (doesn't required browser)</i>
skey	Alpha-numeric	Compulsory. MD5 encryption	Security hash key. Verify Key is required.

3. Integration example (This is a GET method):

ASP: skey = md5(txID & domain & "xxxxxx" & amount)

PHP: \$skey = md5(\$txID . \$domain . "xxxxxx" . \$amount);

* Replace the **xxxxxx** with your Verify Key

Format into HTML :

```
<a href='https://www.onlinepayment.com.my/NBepay/q_by_tid.php?amount=3899&txID=65234&domain=shopA&skey= e1c4c60c99116fffc3ce77bd5fd0f7b1'> Update payment status for tranID xxx </a>
```

4. Return data :

Plain text with new line character (type=0)	POST (type=1)
StatCode: 00 StatName: captured TranID: 65234 Amount: 3899.00 Domain: shopA VrfKey: 456cf69e5bddfe8ed47371096	\$_POST[StatCode] = "00"; \$_POST [StatName] = "captured"; \$_POST [TranID] = "65234"; \$_POST [Amount] = "3899.00"; \$_POST [Domain] = "shopA"; \$_POST[VrfKey:] = "456cf69e5bddfe8ed47371096";

Which the Verification key (VrfKey) was encrypted as :-

ASP: md5(amount & "xxxxxx" & domain & txID & status_code)

PHP: md5(\$amount . "xxxxxx" . \$domain . \$txID . \$status_code);

* Replace the **xxxxxx** with your Verify Key

Variable name	Format	Attribute	Description
StatCode	2-digit numeric	00 11 22	In Success group In Failure group In Pending group
StatName	Word	Any status in Success group Any status in Failure group Any status in Pending group	captured, settled, ReqCancel, ReqChargeback, authorized failed, cancelled, chargeback, release, reject, blocked Pending, Unknown, TestOK
TranID	Numeric		Transaction ID
Amount	Floating point		The transaction amount in one bill.
Domain	Alpha-numeric		Merchant ID
VrfKey	Alpha-numeric	MD5 encryption	Encrypted string to verify whether the transaction is from a valid source. Verify Key is required.

Part B (1) : Payment Status Query using Order ID (single result)

1. Front-end URL: https://www.onlinepayment.com.my/NBepay/query/q_by_oid.php

2. Parameters via **GET** or **POST** method *(the variable name and value are case sensitive)*:

Variable name	Format	Attribute	Description
amount	Floating point	Compulsory. Minimum is 1.00	The transaction amount in one bill.
oID	Alpha-numeric	Compulsory	The order id of the latest transaction
domain	Alpha-numeric	Compulsory	Merchant ID
type	Integer	Optional	Method for merchant to receive return data : 0 – in plain text (default) 1 – in POST
url	URL Address	Compulsory if value of type=1	URL to receive return data. <i>*Kindly be informed, data will be returned to merchant's system via background (doesn't required browser)</i>
skey	Alpha-numeric	Compulsory. MD5 encryption	Security hash key. Verify Key is required.

3. Integration example (This is a GET method):

ASP: skey = md5(oID & domain & "xxxxxx" & amount)

PHP: \$skey = md5(\$oID . \$domain . "xxxxxx" . \$amount);

* Replace the xxxxxx with your Verify Key

Format into HTML :

```
<a href='https://www.onlinepayment.com.my/NBepay/query/q_by_oid.php?amount=3899&oID=65234&domain=shopA&skey= e1c4c60c99116ffc3ce77bd5fd0f7b1'> Update payment status for order ID xxx</a>
```

4. Return data :

Plain text with new line character (type=0)	POST (type=1)
StatCode: 00 StatName: captured OrderID : OD001-09 Amount : 59.00 TranID: 65234 Amount: 3899.00 Domain: shopA BillingName : James Blunt VrfKey: 456cf69e5bddfe8ed47371096	\$_POST[StatCode]= "00"; \$_POST[StatName]= "captured"; \$_POST[OrderID] = "OD001-09"; \$_POST[Amount] = "59.00"; \$_POST[TranID]= "65234"; \$_POST[Amount]= "3899.00"; \$_POST[Domain]= "shopA"; \$_POST[BillingName] = "James Blunt"; \$_POST[VrfKey]= "456cf69e5bddfe8ed47371096";



Which the Verification key (VrfKey) was encrypted as:-

ASP: md5(amount & "xxxxxx" & domain & oID & statcode)

PHP: md5(\$amount . "xxxxxx" . \$domain . \$oID . \$statcode);

* Replace the xxxxxx with your Verify Key

Variable name	Format	Attribute	Description
StatCode	2-digit numeric	00 11 22	In Success group In Failure group In Pending group
StatName	Word	Any status in Success group Any status in Failure group Any status in Pending group	captured, settled, ReqCancel, ReqChargeback, authorized failed, cancelled, chargeback, release, reject, blocked Pending, Unknown, TestOK
OrderID	Alpha-numeric		
Amount	Floating-point		
TranID	Numeric		Latest transaction ID .
Domain	Alpha-numeric		Merchant ID
BillingName	Alpha-numeric		Name used to make a transaction.
VrfKey	Alpha-numeric	MD5 encryption	Encrypted string to verify whether the transaction is from a valid source. Verify Key is required.

Part B (2)(i) : Payment Status Query using Order ID (single input)

1. Front-end URL: https://www.onlinepayment.com.my/NBepay/query/q_oid_batch.php

2. Parameters via **GET** or **POST** method *(the variable name and value are case sensitive)*:

Variable name	Format	Attribute	Description
oID	Alpha-numeric	Compulsory	The order id of the latest transaction
domain	Alpha-numeric	Compulsory	Merchant ID
type	Integer	Optional	Method for merchant to receive return data : 0 – in plain text (default) 1 – in POST
url	URL Address	Compulsory if value of type=1	URL to receive return data. <i>*Kindly be informed, data will be returned to merchant's system via background (doesn't required browser)</i>
format	Integer	Optional	Format for return data : 0 – text (each data will be combined by character) 1 – Array <i>* please refer below for sample of return data.</i>
skey	Alpha-numeric	Compulsory. MD5 encryption	Security hash key. Verify Key is required.

3. Integration example (This is a GET method):

ASP: skey = md5(oID & domain & "xxxxxx")

PHP: \$skey = md5(\$oID . \$domain . "xxxxxx");

* Replace the **xxxxxx** with your Verify Key

Format into HTML :

```
<a href='https://www.onlinepayment.com.my/NBepay/query/q_oid_batch.php?oID=65234&domain=shopA&skey= e1c4c60c99116fffc3ce77bd5fd0f7b1'> Update payment status for all order ID:xxx </a>
```

4. Return data :

Plain text : each transaction is separated by newline character (**\n**) and each field is delimited by TAB (**\t**) character. (**type=0**)

TranID	BillingDate	StatCode	StatName	Amount	BillingName
418607	2009-11-26	22	pending	25.00	Lenka
418603	2009-11-26	00	captured	125.10	Mika
418583	2009-11-26	00	captured	71.10	Ciara

POST : Return data in text. Info for each transaction will be separated by | character. (**type=1, format=0**)

```
$_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 : Return data in Array (**\$_POST[Index][Field]**) (**type=1, format=1**)

```
$_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[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";
```


Variable name	Format	Attribute	Description
TranID	Numeric		Unique transaction ID
BillingDate	YYYY-MM-DD		Date and time of the transaction.
StatCode	2-digit numeric	00 11 22	In Success group In Failure group In Pending group
StatName	Word	Any status in Success group Any status in Failure group Any status in Pending group	captured, settled, ReqCancel, ReqChargeback, authorized failed, cancelled, chargeback, release, reject, blocked Pending, Unknown, TestOK
Amount	Floating-point		The transaction amount in one bill.
BillingName	Alpha-numeric		Name used to make a transaction.

Part B (2)(ii)(a) : Payment Status Query using [Order ID](#) (batch input)

1. Front-end URL: https://www.onlinepayment.com.my/NBepay/query/q_by_oids.php

2. Parameters via **POST** method *(the variable name and value are case sensitive)*:

Variable name	Format	Attribute	Description
oids	Alpha-numeric	Compulsory	The combination of Order ID for the transactions and must be URL encoded . Max number of Order ID = 100
domain	Alpha-numeric	Compulsory	Merchant ID
delimiter	Symbol	Compulsory	Separator for the combination of Order ID. Make sure the symbol you are using is not apart of the Order ID. You are not allowed to use below symbol as your delimiter. ", % , * , < , > , ? , \ , \$, & , = Default value = (Merchant may change the delimiter accordingly)
type	Integer	Optional	Method for merchant to receive return data : 0 – in plain text (default) 1 – in POST
url	URL Address	Compulsory if value of type=1	URL to receive return data. <i>*Kindly be informed, data will be returned to merchant's system via background (doesn't required browser)</i>
format	Integer	Optional	Format for return data : 0 – text (each data will be combined by character) 1 – Array <i>* please refer below for sample of return data.</i>
skey	Alpha-numeric	Compulsory. MD5 encryption	Security hash key. Verify Key is required.

3. Integration example :

ASP: skey = md5(domain & oids & "xxxxxx")

PHP: \$skey = md5(\$domain . \$oids . "xxxxxx");

* Replace the **xxxxxx** with your Verify Key

Format into HTML :

```
<form method=post action='https://www.onlinepayment.com.my/NBepay/query/q_by_oids.php'>
<input type=text name='oids' value='23734%7C63872%7C8a8b3%7C1ab31%7C08b23'>
<input type=text name='domain' value=shopA>
<input type=text name='delimiter' value='|'>
<input type=text name='skey' value='fc424f491db75e81a264af9080a18dde'>
<input type=submit value='Query Payment Status'>
</form>
```

4. Return data :

Plain text : each transaction is separated by newline character (**\n**) and each field is delimited by TAB (**\t**) character. (**type=0**)

OrderID	TranID	BillingDate	StatCode	StatName	Amount	BillingName
23734	99876	2011-11-26	22	pending	25.00	Lenka
63872	99876	2011-11-26	00	captured	125.10	Mika
8a8b3	83937	2010-11-26	00	captured	71.10	Ciara

POST : Return data in text. Info for each transaction will be separated by | character. (**type=1, format=0**)

```
$_POST[OrderID] = "23734|63872|8a8b3";
$_POST[TranID] = "99876|99876|83937";
$_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 : Return data in Array (**\$_POST[OrderID][Field]**) (**type=1, format=1**)

```
$_POST[23734][TranID] = "418607";
$_POST[23734][BillingDate] = "2009-11-26";
$_POST[23734][StatCode] = "22";
$_POST[23734][StatName] = "pending";
$_POST[23734][Amount] = "25.00";
$_POST[23734][BillingName] = "Lenka";

$_POST[63872][TranID] = "418603";
$_POST[63872][BillingDate] = "2009-11-26";
$_POST[63872][StatCode] = "00";
$_POST[63872][StatName] = "captured";
$_POST[63872][Amount] = "125.10";
$_POST[63872][BillingName] = "Mika";
```

Variable name	Format	Attribute	Description
OrderID	Alpha-numeric		Order ID for that particular transaction
TranID	Numeric		Unique transaction ID
BillingDate	YYYY-MM-DD		Date and time of the transaction.
StatCode	2-digit numeric	00 11 22	The latest <u>status code</u> for that particular transaction. In Success group In Failure group In Pending group
StatName	Word	Any status in Success group Any status in Failure group Any status in Pending group	The latest <u>status name</u> for that particular transaction. captured, settled, ReqCancel, ReqChargeback, authorized failed, cancelled, chargeback, release, reject, blocked Pending, Unknown, TestOK
Amount	Floating-point		The transaction amount in one bill.
BillingName	Alpha-numeric		Name used to make a transaction.

Part B (2)(ii)(b) : Payment Status Query using [Transaction ID](#) (batch input)

1. Front-end URL: https://www.onlinepayment.com.my/NBepay/query/q_by_tids.php

2. Parameters via **POST** method *(the variable name and value are case sensitive)*:

Variable name	Format	Attribute	Description
tIDs	Alpha-numeric	Compulsory	The combination of Transaction ID for the transactions and must be URL encoded . Each Transaction ID must be separated by symbol. Max number of Transaction ID = 100
domain	Alpha-numeric	Compulsory	Merchant ID
type	Integer	Optional	Method for merchant to receive return data : 0 – in plain text (default) 1 – in POST
url	URL Address	Compulsory if value of type=1	URL to receive return data. <i>*Kindly be informed, data will be returned to merchant's system via background (doesn't required browser)</i>
format	Integer	Optional	Format for return data : 0 – Text (each data will be combined by character) 1 – Array <i>* please refer below for sample of return data.</i>
key	Alpha-numeric	Compulsory. MD5 encryption	Security hash key. Verify Key is required.

3. Integration example :

ASP: `key = md5(domain & tIDs & "xxxxxx")`

PHP: `$key = md5($domain . $tIDs . "xxxxxx");`

* Replace the **xxxxxx** with your Verify Key

Format into HTML :

```
<form method=post action='https://www.onlinepayment.com.my/NBepay/query/q_by_tids.php'>
<input type=text name='tIDs' value='23734%7C63872%7C8a8b3%7C1ab31%7C08b23'>
<input type=text name='domain' value=shopA>
<input type=text name='key' value='fc424f491db75e81a264af9080a18dde'>
<input type=submit value='Query Payment Status'>
</form>
```

4. Return data :

Plain text : each transaction is separated by newline character (**\n**) and each field is delimited by TAB (**\t**) character. (**type=0**)

OrderID	TranID	BillingDate	StatCode	StatName	Amount	BillingName
23734	99876	2011-11-26	22	pending	25.00	Lenka
63872	99876	2011-11-26	00	captured	125.10	Mika
8a8b3	83937	2010-11-26	00	captured	71.10	Ciara

POST : Return data in text. Info for each transaction will be separated by | character. (**type=1, format=0**)

```
$_POST[OrderID] = "23734|63872|8a8b3";
$_POST[TranID] = "99876|99876|83937";
$_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 : Return data in Array (**\$_POST[TranID][Field]**) (**type=1, format=1**)

```
$_POST[418607][BillingDate] = "2009-11-26";
$_POST[418607][StatCode] = "22";
$_POST[418607][StatName] = "pending";
$_POST[418607][Amount] = "25.00";
$_POST[418607][BillingName] = "Lenka";

$_POST[418603][BillingDate] = "2009-11-26";
$_POST[418603][StatCode] = "00";
$_POST[418603][StatName] = "captured";
$_POST[418603][Amount] = "125.10";
$_POST[418603][BillingName] = "Mika";
```

Variable name	Format	Attribute	Description
TranID	Numeric		Unique transaction ID
BillingDate	YYYY-MM-DD		Date and time of the transaction.
StatCode	2-digit numeric	00 11 22	The latest <u>status code</u> for that particular transaction. In Success group In Failure group In Pending group
StatName	Word	Any status in Success group Any status in Failure group Any status in Pending group	The latest <u>status name</u> for that particular transaction. captured, settled, ReqCancel, ReqChargeback, authorized failed, cancelled, chargeback, release, reject, blocked Pending, Unknown, TestOK
Amount	Floating-point		The transaction amount in one bill.
BillingName	Alpha-numeric		Name used to make a transaction.

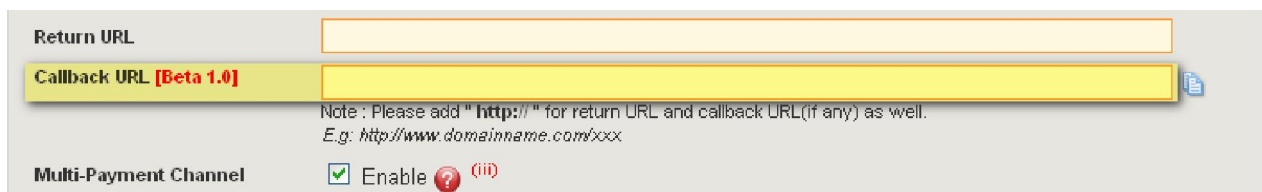
MOLPay CALL BACK QUERY (Beta 1.0)

MOLPayCallback Query is the backend notification system initiated by MOLPay used to inform merchant's system automatically on any changes of payment status with MOLPay. This system is suitable for transaction that does not complete the payment loop in MOLPay.

By implementing this system, merchant's website able to do some admin controlled functions automatically such as completing orders, products controlling or any other which related to the affected transaction.

In order to activate this system, merchant have to defined call back URL on MOLPay Merchant Profile (*Figure 6*) and related parameters will be submitted to merchant callback URL by POST method (all these values were returned by MOLPay).

Note: Kindly be informed that this feature is not available for MOLPay test account.



The screenshot shows a form with the following fields and options:

- Return URL:** A text input field.
- Callback URL [Beta 1.0]:** A text input field with a yellow background.
- Note:** Please add "http://" for return URL and callback URL(if any) as well. E.g: <http://www.domainname.com/xxx>
- Multi-Payment Channel:** A checkbox labeled "Enable" with a red circle containing the number (ii) next to it.

Figure 6

1. Return parameters (by POST method) :

Variable name	Format	Attribute	Description
nbc	Numeric	1	Code that used to notify the incoming to merchant callback URL.
amount	Floating point		The transaction amount in one bill.
orderid	Alpha-numeric		The bill / invoice number
appcode	Alpha-numeric		Bank approval code
tranID	Numeric		Transaction ID for tracking purpose
domain	Alpha-numeric		Merchant ID
status	Numeric	00, 11, 22	Status of transaction : 00 is success 11 is failure 22 is pending
currency	Character		It depends on the transacted currency.
paydate	Date / Time	YYYY-MM-DD HH:mm:ss	Date and time of the transaction
skey	Alpha-numeric	MD5 encryption	Encrypted string to verify whether the transaction is from a valid source. Verify Key is required.

2. Example of callback URL script

Example for **PHP** Developer

```
<?PHP
$keykey          ="xxxxxxx";

//----- below don't change -----
$nbcb            =$_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'];
$skey            =$_POST['skey'];

// All undeclared variables below are coming from POST method
$key0            = md5( $tranID.$orderid.$status.$domain.$amount.$currency );
$key1            = md5( $paydate.$domain.$key0.$appcode.$keykey );
if( $skey != $key1 ) $status= -1; // invalid transaction
//-----

if( $nbcb==1 ) {

    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 .....
    }

}

?>
```

* Replace xxxxxxxx with your MOLPay Verify Key

Example for **ASP/ASP.NET** developer

```
<!--#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 NetBuilder support team
' Some variables below are coming from POST method

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

nbc b      = Request.Form("nbc b")
tranID     = Request.Form("tranID")
orderid    = Request.Form("orderid")
status     = Request.Form("status")
domain     = 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 & domain & key0 & appcode & "xxxxxx" )

' invalid transaction if the key is different
If skey <> key1 then
    status= -1
End if

If nbc b = "1" then

    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
    End if

End if

%>
```

* Replace xxxxxxxx with your MOLPay Verify Key

MOLPay VERIFY KEY

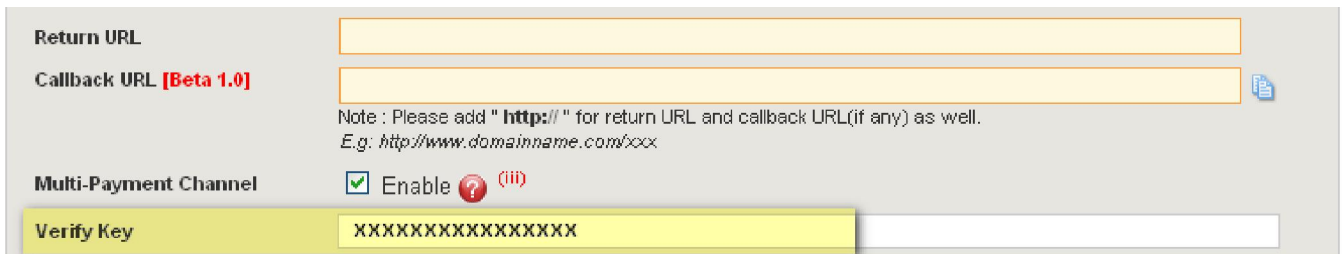
MOLPay Verify Key is uniquely encrypted string owned by all MOLPay merchants. The purpose of it is to provide more secure transaction for each transaction that going through with MOLPay.

MOLPay use the Verify Key for various type of function such as:

- To integrate MOLPay Online Payment with Merchant Website, to verify MOLPay payment, to do checking with the transaction made on MOLPay, etc.

How to get the Verify key?

- Logon to MOLPay Merchant Admin site.
- Go to Merchant Profile tab.
- Scroll down until you see the word “**Verify Key**”
- Get the value and use it on any functions that require it.
- Kindly refer figure 7 below.



The screenshot shows a form with the following fields and options:

- Return URL**: A text input field.
- Callback URL [Beta 1.0]**: A text input field with a document icon on the right.
- Note**: Please add " **http://** " for return URL and callback URL(if any) as well.
E.g: *http://www.domainname.com/xxx*
- Multi-Payment Channel**: A checkbox labeled "Enable" with a red question mark icon and "(iii)" next to it.
- Verify Key**: A text input field containing the placeholder text "XXXXXXXXXXXXXXXXXXXX".

Figure 7














xxxxxxxxxxxxxx – is the Verify Key provided by MOLPay to merchant.

Ref 1 : List of Country Names & Code

<http://www.iso.org/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html>

Please note that United Kingdom is GB (instead of UK)

Ref 2 : PayPal Accepted Currency

Currency	ISO Code
 U.S Dollar	USD
 Australian Dollar	AUD
 British Pound	GBP
 Canadian Dollar	CAD
 Czech Koruna	CZK
 Danish Krone	DKK
 Euro	EUR
 Hong Kong Dollar	HKD
 Hungarian Forint	HUF
 Israeli New Shekel	ILS
 Japanese Yen	JPY
 Malaysian Ringgit	MYR
 Mexican Peso	MXN
 New Zealand Dollar	NZD
 Norwegian Krone	NOK
 Philippine Peso	PHP
 Polish Zloty	PLN
 Singapore Dollar	SGD
 Swedish Krona	SEK
 Swiss Franc	CHF
 Taiwan New Dollar	TWD
 Thai Baht	THB

For more info : https://www.paypal.com/cgi-bin/webscr?cmd=p/sell/mc/mc_intro-outside

Ref 3 : MOLPay Multiple Return URL

Multiple Return URL (front-end return url) has been designed to allow MOLPay active merchant to integrate this online payment service into multiple online shop. This is the advantage for MOLPay merchant as they can just use only ONE MOLPay merchant account on multiple websites whenever they needed. In order to do so, merchant just have to define particular return URL in payment page for each online shop available. At then end of transaction loop, front-end return URL will take an action instead of return URL defined in MOLPay Merchant Profile (back-end return URL). (Refer Figure 8)

How does it work ?

1. Merchant have to define front-end return URL together with others parameter (refer page 6), and pass it over to payment page.
2. Front-end return URL detected by MOLPay.
3. MOLPay carry on with transaction processing.
4. When transaction loop ended :
 - a. MOLPay will redirect to front-end return URL detected in step (2). Or,
 - b. MOLPay redirect to back-end return URL, if option 4(a) is not available.

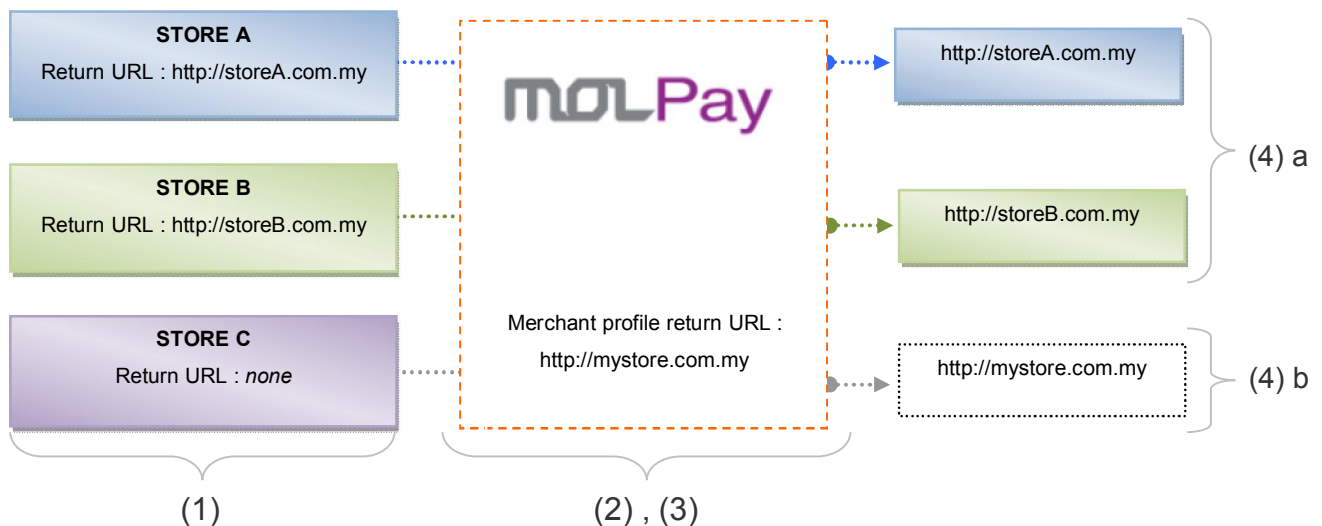


Figure 8

Ref 4 : MOLPay Vcode

MOLPay vcode can be defined as an encrypted security code generated by merchant used to verify a transaction on merchant's payment page. Besides that, the purpose of the vcode is to prevent any changes occur to the payment info and to authorize the validity of the payment sources.

It is **compulsory** for each requested transaction after “Enable Verify Payment” setting has been activated in merchant profile (please refer figure 9 below).



Figure 9

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

- i. Transaction amount
- ii. MOLPay Merchant ID
- iii. Order number
- iv. MOLPay Verify Key

How to generate vcode?

Vcode = md5(amount & merchant ID & order id & verify key)

Below is the example to generate vcode using PHP

```
<?php
$amount           = "27.60";
$merchantID       = "ACME";
$orderid          = "OD8842";
$verifykey        = "xxxxxxxxx";

// vcode formula
$vcode            = md5( $amount.$merchantID.$orderid.$verifykey );

// output of the vcode based on above information would be equals to :
$vcode            = "ec7f2c6e85769728a5e9b75893ee6bc1";
?>
```

* Replace xxxxxxxx with your MOLPay Verify Key

To ensure the vcode generated was correct, merchant may visit the following link for checking. <https://www.onlinepayment.com.my/NBepay/query/vcode.php>

What happen if merchant wrongly generated vcode?

Merchant or buyer will found an error on Merchant's secure payment page as below :



SECURE ONLINE PAYMENT

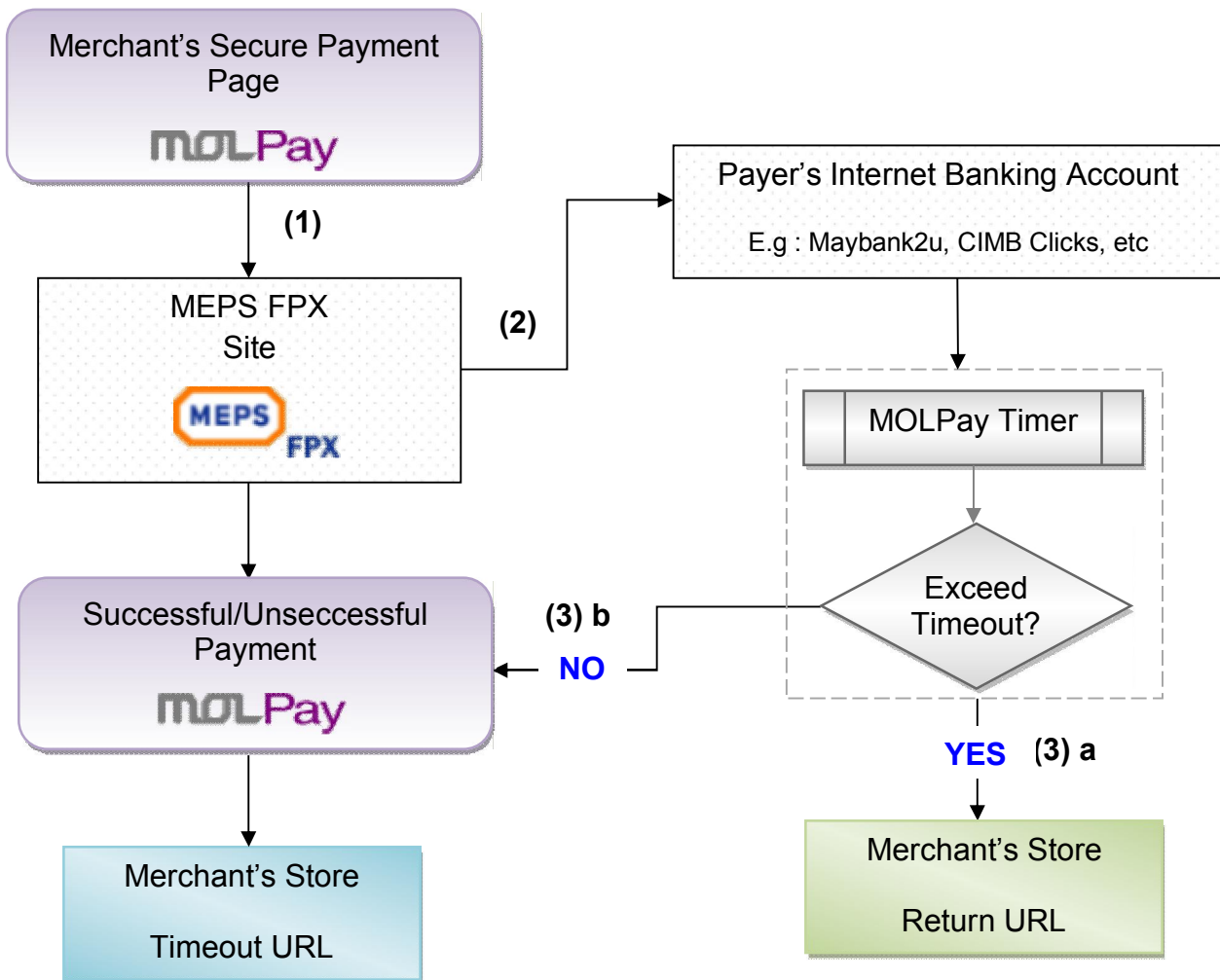


Your payment info format not correct !

[BACK](#)

No credit card details (number and expiry date) are stored in any form, anywhere.
Transaction will be processed in real-time on a secured site (SSL).

Ref 5 : FPX Asynchronous Payment Flow



How does it work ?

1. From merchant's payment page, customer will be directed to MEPS FPX site and from there, customer could either proceed further or to terminate the transaction process immediately.
2. If customer chooses to proceed, they can select any internet banking account from the options provided on MEPS FPX site. At the same time, MOLPay will start the timer and count the duration time (in minutes) of processing transaction.
3.
 - a) If the duration time exceeded merchant timeout (preset in merchant profile), customer will be redirected back to merchant timeout URL. Merchant may display some messages (e.g : *Your payment status will be updated accordingly after a few minutes*) on the timeout URL to acknowledge customer that the system is now processing the final status of the payment.
 - b) Otherwise, system will direct customer back to MOLPay successful/unsuccessful receipt page.
4. From MOLPay successful/unsuccessful receipt page, system will divert customer back to merchant return URL and merchant may update order to the website accordingly.



Info :

- i) Merchant can specify the **Timeout URL** at their Merchant profile.
- ii) This timeout URL only applied to merchant who has "FPX Asynchronous Payment" feature activated in Merchant profile.

Through this feature, merchant will be able to set a timeout (in minutes) on payment page for MOLPay FPX transaction. Payment cycle which has been exceeded timeout will be flagged as "*Pending*" and return to merchant's timeout URL with status "22".



Logos of all Brand Name

Merchant can get the logo from here :

<https://www.onlinepayment.com.my/molpaylogos.zip>