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Testing Transactions

Before you activate your website or application for use by buyers, test your integration. A simulated payment network handles transactions, enabling you to verify the configuration and operation of your website or application. No money changes hands.

Setting Up The Payflow Gateway Testing Environment

Before testing transactions be sure you are linked to the test servers.

Direct all transactions to the host URL for testing. See [“Host URL Addresses”](#) on page 50. PayPal's simulated network processes transactions directed to the URL.

Testing Guidelines

Follow these guidelines for testing.

- While testing, use only the credit card numbers for testing. Other numbers produce an error.
- Expiration date must be a valid date in the future. Use the format `mm/yy`.
- To view the credit card processor that you have selected for testing, see [PayPal Manager](#).

Processors Other Than PayPal

For processors other than the PayPal processor, use the guidelines below.

Credit Card Numbers for Testing

For processors other than PayPal, use the following credit card numbers for testing. Any other card number produces a general failure.

American Express	378282246310005
American Express	371449635398431
American Express Corporate	378734493671000

Diners Club	38520000023237
Discover	6011111111111117
Discover	6011000990139424
JCB	3530111333300000
JCB	3566002020360505
MasterCard	5555555555554444
MasterCard	5105105105105100
Visa	4111111111111111
Visa	4012888888881881
Visa	42222222222222

NOTE: Even though this number has a different character count than the other test numbers, it is the correct and functional number.

Result Values Based On Amount Submitted

You can use the amount of the transaction to generate a particular result value. The following table lists the general guidelines for specifying amounts to submit in requests.

Amount	Result
\$0 – \$1000	RESULT value 0 (Approved)
\$1001 – \$2000	Certain amounts in this range return specific PayPal results. You can generate the results by adding \$1000 to that RESULT value. For example, for RESULT value 13 (Referral), submit the amount 1013. If the amount is in this range but does not correspond to a result supported by this testing mechanism, Payflow returns RESULT value 12 (Declined).
\$2001+	RESULT value 12 (Declined)

Result Values Based On Amount Submitted and Processor

This table lists the RESULT values that you can generate using the amount of the transaction. To generate a specific value, submit an amount of 1000 plus the RESULT value number (for example, submit an amount of 1013 for a RESULT value of 13).

Processing Platform	RESULT Values Available for Testing
American Express Brighton	0, 12, 13, 104, 1000
Elavon	0, 12, 13, 104

Processing Platform	RESULT Values Available for Testing
First Data Merchant Services North	0, 4, 5, 12, 13, 23, 24, 114, 1000
First Data Merchant Services Nashville	0, 12, 13, 104
First Data Merchant Services South	0, 12, 13, 104
Global Payments Central	0, 4, 5, 8, 12, 13, 23, 24, 104, 111, 114, 1000
Global Payments East	0, 4, 5, 12, 13, 23, 24, 30, 100, 104, 114, 1000
Paymentech Salem (New Hampshire)	0, 12, 13, 104
Paymentech Tampa	0, 3, 4, 5, 12, 13, 23, 24, 1000
TSYS Acquiring Solutions	0, 4, 12, 13, 23, 104, 114, 1000
Vantiv (formerly Fifth Third Processing Solutions)	0, 4, 5, 12, 13, 23, 24, 114, 1000

Result Values Based On Alternate Generation Methods

The following table shows another method for obtaining RESULT values. Servers do not return non-zero RESULT values from processors. Therefore, you cannot simulate non-zero RESULT values using the amount. In some cases, you may obtain certain results using the RESULT value plus 1000 even though this table suggests an alternate means of obtaining the RESULT value.

RESULT value	Definition	How to test using Payflow Gateway
0	Approved	Use an AMOUNT of \$1000 or less For all processors except Global Payments Central (MAPP) and FDI Credit (C) and force (F) transactions will always be approved regardless of dollar amount or card number
1	User authentication failed	Use an invalid PWD
2	Invalid tender	Use an invalid TENDER, such as G
3	Invalid transaction type	Use an invalid TRXTYPE, such as G
4	Invalid amount	Use an invalid AMOUNT, such as -1
5	Invalid merchant information	Use the AMOUNT 1005 - Applies only to the following processors: Global Payments East and Central, and American Express
7	Field format error	Submit a delayed capture transaction with no ORIGID
12	Declined	Use the AMOUNT 1012 or an AMOUNT of 2001 or more
13	Referral	Use the AMOUNT 1013

RESULT value	Definition	How to test using Payflow Gateway
19	Original transaction ID not found	Submit a delayed capture transaction with an invalid ORIGID
22	Invalid ABA number	Applies only to ACH transactions – submit an invalid ABA number (8 digits)
23	Invalid account number	Submit an invalid account number, for example, 0000000000000000
24	Invalid expiration date	Submit an invalid expiration date, for example, 0298
25	Transaction type not mapped to this host (Processor)	Submit a transaction for a card or tender you are not currently set up to accept, for example, a Diners card if you aren't set up to accept Diners
29	Invalid XML document	Pass a bad XML document (XMLPay users only)
30	Duplicate Transaction	Use the AMOUNT 1030 - Only applies to Global Payments East and Global Payments Central processors
50	Insufficient funds available	Use the AMOUNT 1050 - Only applies to Paymentech
99	General error	Use the AMOUNT 1099 - Only applies to Global Payments East
100	Invalid transaction returned from host (Processor)	Use the AMOUNT 1100 - Only applies to Global Payments East and Central
101	Time-out value too small	Set timeout value to 1
103	Error reading response from host (Processor)	Use the AMOUNT 1103
104	Timeout waiting for processor response	Use the AMOUNT 1104
105	Credit error	Attempt to credit an authorization
108	Void error	Attempt to void a captured authorization
111	Capture error	Capture an authorization transaction twice or attempt to capture a transaction that is not an authorization transaction
112	Failed AVS check	You cannot generate this RESULT value by submitting an amount of 1112, but must submit a value for Address Verification Service that will fail; in production, this error occurs only if your account is configured by PayPal customer service to use the "AVS Deny" feature
113	Cannot exceed sales cap	Applies to ACH transactions only

RESULT value	Definition	How to test using Payflow Gateway
114	CVV2 Mismatch	Use the AMOUNT 1114. Only applies to TSYS Acquiring Solutions, Merchant e-Solutions, and Global Payments East and Global Payments Central processors
1000	Generic Host (Processor) Error	Use the AMOUNT 2000 - Does not apply to Elavon (formerly Nova), American Express, or Global Payments East processors

Testing Address Verification Service

The Payflow testing server simulates address verification service by returning a value for AVSADDR based on the first 3 characters of the submitted value for BILLTOSTREET.

The testing server returns a value for AVSZIP based on the submitted BILLTOZIP value as shown in the table.

If BILLTOSTREET starts with 667 or higher or begins with a non-numeric character, then the simulator returns AVSADDR=X, AVSZIP=X.

The following table tests AVSADDR.

Submitted Value for BILLTOSTREET	Example BILLTOSTREET Value	AVSADDR Result
000-333	24285 Elm	Y
334-666	49354 Main	N
667 or higher or begins with a non-numeric character	79232 Maple	X

The following table tests AVSZIP.

Submitted Value for BILLTOZIP	Example BILLTOZIP Value	AVSZIP Result
00000-50000	00382	Y
50001-99999	94303	N
Any value (if street address is 667 or higher or begins with a non-numeric character)	BILLTOSTREET=79232 Maple, BILLTOZIP=20304	X

Testing Card Security Code

If you submit a value for the card security code, the cardholder's bank returns a Yes / No / Not Supported (Y / N / X) response on whether the value matches the number on file at the bank. Card security code is described in "Card Security Code Validation".

NOTE: Some processors will decline (RESULT value 12) a transaction if the card security code does not match without returning a CVV2MATCH value. Test the results and check with your processor to determine whether they support card security code checking.

For the testing server, the first three characters of the CVV2 value determine the CVV2MATCH result, as shown here.

Testing CVV2MATCH

CVV2 Value	CVV2MATCH Value
000	Y
001-300	Y
301-600	N
601 or higher	X

Testing the Litle Automatic Account Updater Feature

The Litle Automatic Account Updater feature identifies outdated card information, "repairs" it, and substitutes new card information before submitting the transaction to the network. See the "Litle Automatic Account Updater" on page 110 section for more information.

Merchants utilizing this feature should check for the presence of the CCUPDATED=Y response parameter, and if it is returned, should also check for the presence of the ACCT and EXPDATE response parameters to determine what card information has been updated.

Merchants can test their integration for the Litle Automatic Account Updater feature in the Payflow pilot test environment by doing the following.

1. In the ACCT request parameter, pass one of the following testing card numbers:

Card number passed in ACCT request parameter	Updated card number returned in ACCT response parameter
4111111111111111	4321432143214321
4012888888881881	4012000033330026
5105105105105100	5454545454545454
5560136761278244	5105105105105100

NOTE: Only the last 4-digits of the updated credit card number will be returned.

2. In the EXPDATE request parameter, pass one of the following expiration dates:

Expiration date passed in EXPDATE request parameter	Updated expiration date returned in EXPDATE response parameter
0000	0919
1213	1218
0120	0150
0230	0250
0340	0350

3. In the AMT request parameter, pass an amount that falls within one of the following ranges to bring about different account updater test cases:

Amount passed in AMT request parameter	Test case
1000.00 > AMT >= 500.00	Both an updated credit card number and an updated expiration date
500.00 > AMT >= 400.00	Only an updated credit card number
400.00 > AMT >= 300.00	Only an updated expiration date

PayPal Processor

For the PayPal processor, use the following guidelines.

Credit Card Numbers for Testing

For the PayPal processor, use the following credit card numbers for testing. Any other card number produces a general failure.

American Express	378282246310005
American Express	371449635398431
Amex Corporate	378734493671000
Australian BankCard	5610591081018250
Diners Club	30569309025904
Diners Club	38520000023237
Discover	6011111111111117

Discover	6011000990139424
JCB	3530111333300000
JCB	3566002020360505
MasterCard	5555555555554444
MasterCard	5105105105105100
Visa	4111111111111111
Visa	4012888888881881
Visa	422222222222

NOTE: Even though this number has a different character count than the other test numbers, it is the correct and functional number.

Result Values Based On Amount

The following table shows another method for obtaining RESULT values. The servers do not return non-zero RESULT values from processors. Therefore you cannot simulate non-zero RESULT values using the amount. In some cases, you may obtain certain results using the RESULT value plus 1000 even though this table suggests another means of obtaining the RESULT value.

Result	Definition	How to test
0	Approved	Use an AMOUNT of 10000 or less
3	Invalid transaction type	Use the AMOUNT 10402
4	Invalid amount	Use any of these as AMOUNT: <ul style="list-style-type: none"> • 10400 • 10401 • 10403 • 10404
5	Invalid merchant information	Use any of these as AMOUNT: <ul style="list-style-type: none"> • 10548 • 10549

Result	Definition	How to test
7	Field format error	Use any of these as AMOUNT: <ul style="list-style-type: none"> • 10405 • 10406 • 10407 • 10408 • 10409 • 10410 • 10412 • 10413 • 10416 • 10419 • 10420 • 10421 • 10509 • 10512 • 10513 • 10514 • 10515 • 10516 • 10517 • 10518 • 10540 • 10542
12	Declined	Use any of these as AMOUNT: <ul style="list-style-type: none"> • 10417 • 15002 • 15005 • 15006 • 15028 • 15039 • 10544 • 10545 • 10546
13	Referral	Use the AMOUNT 10422
23	Invalid account number	Use any of these as AMOUNT: <ul style="list-style-type: none"> • 10519 • 10521 • 10522 • 10527 • 10535 • 10541 • 10543

Result	Definition	How to test
24	Invalid expiration date	Use any of these as AMOUNT: <ul style="list-style-type: none">• 10502• 10508
30	Duplicate Transaction	Use the AMOUNT 10536
105	Credit error	Attempt to credit an authorization
112	Failed AVS check	Use the AMOUNT 10505
114	CVV2 Mismatch	Use the AMOUNT 10504
1000	Generic Host (Processor) Error	Use an AMOUNT other than those listed in this column