



VERePAY Web Services Developers
Guide
Version 5.1

Interface Specification

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Document History

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1.5	June 4, 2004	A. Tate	Original
4.5	May 24 2005	A.Tate	Add Supplier ID and Affiliate ID
5.1	Dec 28 2005	A.Tate	Add VBV

1. Purpose

The purpose of this document is to provide technical guidelines for integrating to and using the VERePAY gateway switch and VEReFIED.com payer authentication MPI. This documentation is intended to be used by software developers comfortable with the use of HTTPS posting of name/value pair data. While all examples shown in this document are written in the C# language, any language capable of submitting data via HTTPS posting of name/value pairs can be used to communicate with the VERePAY gateway switch and VEReFIED.com payer authentication MPI.

2. Overview

The VERePAY Gateway Switch (VERePAY) is a gateway that supports the secure transmission of transactions through the use of a simple to integrate API based on the HTTPS Posting of name/value pairs. The gateway is connected to a complex rules based switch that routes the transaction to the appropriate credit card processor. The switch has the ability to route a transaction based not only on the terminal number, but also on the card type being submitted and also the transaction type. This allows for easy switching of merchants from one processor to another. Once VERePAY has been implemented into your payment system, it will not need to be updated unless you wish to add additional features as they come available. In other words, you code once and we handle the changes.

If a merchant wants to switch to a new processor we simply point them to the new processor either for all transactions or just the card types they want to switch. We then ensure that settlement, void and refund of transactions are sent to the original processor for the authorization while new transactions are routed to the new processor. That means that you only need to be concerned with coding to one simple format.

VERePAY includes an online Portal application that is accessed through a browser which supports the API. This portal includes a powerful virtual terminal as well as several reports that allow the merchant or client to be able to research transactions. In addition, it allows for authorizations to be settled or voided and settled transaction to be refunded.

VERePAY provides several measures to combat cardholder fraud. The portal has the ability to mark a credit card as being blocked which prevents the card from being used at the merchant's web site. It is also possible to block a card for the whole client, or for all merchants. VERePAY staff also set the AVS and CVV settings for each merchant as an additional fraud prevention tool. In this manner we provide the merchant the protection of our risk management experience. We set the allowable AVS and CVV responses at the terminal level while providing the merchant the greatest acceptance flexibility for the merchant type. VERePAY supports both domestic and international AVS and CVV.

VERePAY utilizes HTTPS Secure Socket Layers for both the API and also the Portal application. VERePAY resides in a state of the art processing facility that is CISP and SAS70 certified. Load balancing and redundancy are utilized to provide for maximum availability. The unique architecture of the application makes it impossible to access our database server from the web. We encrypt all sensitive data, including Card Numbers, terminal numbers and all credentials using a very complex implementation of 3DES encryption that utilizes multiple keys and vectors, for added peace of mind. Complete card number are not available on any of our systems in compliance with Visa's CISP requirements (Cardholder Information Security Program).

In addition, VEReFIED.com is an association certified payer authentication service that performs Verified-by-Visa and MasterCard SecureCode. It is very easy to implement and

provides an added protection to the merchant, in some cases fully protecting the merchant from certain charge backs.

We will continually be adding new features to VERePAY, and welcome comments and suggestions from all our users. Rest assured, if you do experience any problems, we have staff available 24 hours a day.

3. API

Overview

VERePAY allows transactions to be submitted through a simple to implement HTTPS Posting Name/Value pair API. This allows for rapid integration of VERePAY into your payment solution. Any language that supports the submission of data through a secure HTTPS Post of name/value pair data can be used to interface to VERePAY. Separate testing and production environments support the testing of new versions of your solutions without affecting the existing production version. Dedicated support staff is always on hand to help you during your integration via email and telephone. VEReFIED.com is implemented through HTTPS Posting Name/Value pairs and through browser redirection.

Testing and Production Environments

We utilize various environments for testing and production. While integrating to VERePAY/VEReFIED.com or when upgrading your payment system, you should use the test system. Once live, your payment system should point to the production system. The testing system will still be available to you for additional development or testing after you are live.

Test System

The Name/Value pair API is located at <https://dev.verepay.cc/ezpay/iPay.aspx>.

Our test system is outside of our CISP environment and is not secured by SSL. For this reason we do not recommend the use of live card numbers. Instead, please use the test card numbers shown below for the test system.

Card Type	Test Card Number
Visa	4123456789012349
MasterCard	5123456789012346

The test system Portal is located at <https://dev.verepay.cc>. Before you can begin testing you will need to obtain a user id and password for the test portal. Please email support@verepay.com for the test URL and credentials for implementing VEReFIED.com.

Obtaining a User ID and password for the test Portal.

You will need to log on to the test portal to retrieve the terminal number and store key that you need to submit transactions. Please email support@verepay.com to request a test logon. Please provide your name, company name and contact details.

Production System

The Production Name/Value pair API is located at <https://www.verepay.cc/ezpay/iPay.aspx>.

The Production Portal is located at <https://www.verepay.cc>. Please email support@verepay.com for the production url and credentials for VEReFIED.com.

Transaction Request

Transactions are submitted to VERePAY through an HTTPS Post of name/value pairs. This post must be performed by the server, not from the cardholder's browser. The following code example (in C#) shows how to send a transaction request to VERePAY and how to receive the response.

```
string str =
@"http://dev.verepay.cc/ezpay/iPay.aspx?type=A&terminal=1700000001&storeKey=c49b-c250-
fc46-493c&vendor=bcc&cardNumber=5123456789012346&expiryDate=1004&tranAmount=100";
WebRequest req = WebRequest.Create(str);

WebResponse result = req.GetResponse();
Stream ReceiveStream = result.GetResponseStream();

Byte[] read = new Byte[512];
int bytes = ReceiveStream.Read(read, 0, 512);

string result = "";
while (bytes > 0)
{
    Encoding encode = System.Text.Encoding.GetEncoding("utf-8");
    result = result + encode.GetString(read, 0, bytes);
    bytes = ReceiveStream.Read(read, 0, 512);
}
```

This will post a transaction request to the test server and then receive the result. A typical result is shown below.

```
result=0,tranID=417,largeTranID=100000000417,authCode=HOSTOK,authMessage=Approved,avsResp
onse=,cvvResponse=P,tranDate=20040604,tranTime=215954
```

Each name/value pair in the response is separated by a comma. The following code example shows how to break apart the string.

```
string[] response = result.Split(',');

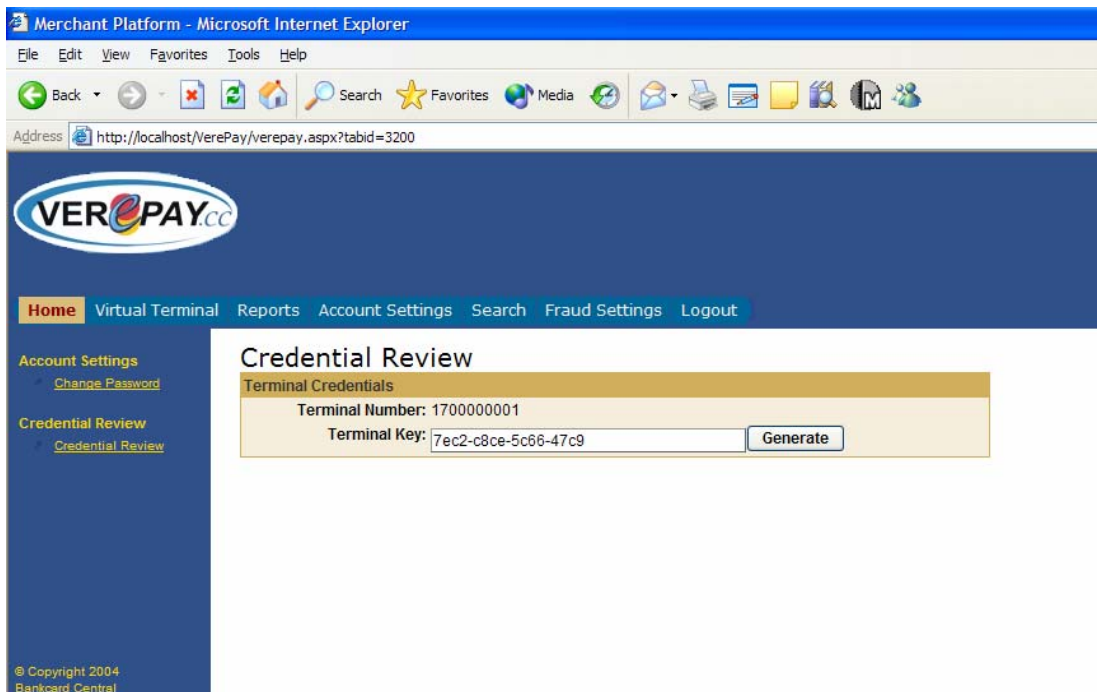
string key;
string valuePart;
NameValueCollection nr = new NameValueCollection();
int i = 0;
foreach (string xx in response)
{
    i = xx.IndexOf("=");
    key = xx.Substring(0,i);
    valuePart = xx.Substring(i + 1);
    nr.Add(key,valuePart);
}
```

You can then access individual parts of the response from the collection as shown below.

```
nr["result"].ToString();
```

Credentials

VERePAY requires credentials that are unique for each terminal within the switch. It uses these credentials instead of processor specific credentials to provide an added layer of security by safeguarding the processor credentials. In addition, by using our own credentials, switching processors is easy as the processor credentials are never sent in with the transaction requests. The VERePAY credentials include a terminal number and terminal key. These are sent in with every transaction request as the terminal and Store Key parameters. Credentials are retrieved from the Portal. These are found under the Account Settings menu item, sub item Credential Review. Full details on the use of the Portal can be found in the VERePAY Portal Merchant User Guide. The Credential Review page in the Portal is also used to generate a new terminal key. We recommend generating a new key once a month. If you feel that the terminal key has been compromised, generate a new one immediately. You are responsible for safeguarding the terminal number and terminal key.



Transaction Types

VERePAY supports the following transaction types.

- Authorization
- Capture of a previous Authorization. This marks the transaction for settlement.
- Void of a previous Authorization
- Refund of a previously settled transaction
- Test. Ensures the system is responding.

Blind credits are not supported by the API but can be entered through the Virtual Terminal of the Portal.

VEReFIED.com can be integrated into VERePAY. While the interaction with VEReFIED.com is separate from that with VERePAY, the results of the payer authentication attempt can be passed to the VERePAY authorization.

Transaction Request and Response Parameters

The following tables show all the parameters that can be passed as part of the supported transaction types in the transaction request. Required parameters are shown with an “R” in the required column. In addition it shows the parameters that will be received back with the response.

Authorization

An authorization transaction submits a credit card authorization to the VERePAY switch. If the terminal is set up to automatically settle all successful authorizations, an authorization transaction will also capture the authorization after it has been authorized. If the terminal is not set up to automatically settle successful authorizations, transactions must be settled manually either by sending a Capture of a Previous Authorization transaction through the API or by using the Virtual Terminal or Transaction Review to settle the transaction through the Portal. Details of the Virtual Terminal and Transaction Review can be found in the VERePAY Portal Merchant User Guide.

Request

The following table shows the parameters that make up an authorization transaction request. Required parameters are shown with an “R” in the required column.

Field Name	Required	Value	Description
type	R	Auth or A	The type of transaction being performed
terminal	R	From Portal	The VERePAY terminal number which can be retrieved from the Credential Review page of the VERePAY Portal
storeKey	R	From Portal	The VERePAY terminal key which can be retrieved from the Credential Review page of the VERePAY Portal
vendor	R	bcc	Internal code used by Verepay
cardNumber	R		Credit Card Number
expiryDate	R		Expiry Date of card. This must be 4 characters in the format mmyy
cvvData			The 3 or 4 digit security code from the card
tranAmount	R		Authorization amount. All amounts are assumed to include 2 decimal places. The decimal point is optional. (For example, a tranAmount sent in as 100 will run as 1.00)
taxAmount			Tax amount.
shippingAmount			Shipping amount
billName			Name of the Cardholder

billAddress			First line of the address of the Cardholder
billCity			City of the Cardholder
billState			State of the Cardholder (should be 2 or 3 character state code for US addresses)
billZipCode			Zipcode of the Cardholder
billCountry			Country of the Cardholder (Should be US for US addresses)
billPhone			Phone number of Cardholder
billEmail			Email address of Cardholder
shipName			Shipping Customer Name
shipAddress			Shipping Address of Customer
shipCity			Shipping City of Customer
shipState			Shipping State of Customer
shipZipCode			Shipping Zip Code of Customer
shipCountry			Shipping Country of Customer
shipPhone			Shipping Phone number of Customer
shipEmail			Shipping Email address of Customer
clientIP			IP address of the customer
invoiceNumber			Merchant order number for the transaction
invoiceDescription			Short description of the transaction
localDate			Transaction Date in the format yyyyymmdd
localTime			Transaction Time in the format hhmmss
descriptorName			This appears as the transaction description on the Cardholder's statement. If passed, the Name should be the merchant name. It can be a maximum 25 characters. Additional characters will be removed ***
descriptorPhone			This should be the Phone number of the merchant. It can be a maximum 10 characters in length. Only numbers should be entered. Additional or invalid characters will be removed. If the descriptorName is sent, then the descriptorPhone should also be sent ***
supplierID			Optional Supplier ID
affiliateID			Optional Affiliate ID
eci			ECI returned by VEReFIED.com
mares			MARES returned by VEReFIED.com. This must be URL encoded
vbvEnrolled			Value returned by VEReFIED.com
vbvVerified			Value returned by VEReFIED.com

*** Only use the descriptorName and descriptorLocation when your default transaction descriptor is not appropriate. These fields are only supported by HMSBlue and CardSystems.

Response

The response to an authorization transaction will be returned in the format shown below.

result=x,tranID=x,authCode=x.authMessage=x,avsResponse=x,cvvResponse=x,tranDate=x,tranTime=x

This should be broken apart into name/value pairs. The response for an authorization transaction will always contain a result parameter. Always test the result first to see if the transaction was successful. A 0 value means the authorization was successful. The following table shows all the parameters that make up an authorization response.

Field Name	Value	Description																																				
result	0 or 1	Result of the transaction. A value of 0 denotes that the transaction was successful. A value of 1 denotes that the transaction failed.																																				
tranID		Transaction ID for the transaction. This is required to capture, void or refund the transaction																																				
authCode		Authorization Code for the transaction																																				
authMessage		Message showing the result of the transaction. This will either be a message generated by the processor or will be a message generated by the VERePAY switch. See Appendix A for VERePAY Messages.																																				
avsResponse		Result of AVS. Domestic <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #cccccc;"> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>F</td><td>Exact Match. 9 digit Match</td></tr> <tr><td>M</td><td>Exact Match. 5 digit Match</td></tr> <tr><td>A</td><td>Address Only</td></tr> <tr><td>9</td><td>9 digit Match</td></tr> <tr><td>5</td><td>5 digit Match</td></tr> <tr><td>N</td><td>No Match</td></tr> <tr><td>U</td><td>Address Unavailable</td></tr> <tr><td>R</td><td>Issuer System Unavailable</td></tr> <tr><td>X</td><td>Ineligible for AVS</td></tr> <tr><td>S</td><td>Service not supported</td></tr> <tr><td>I</td><td>International Card not supported</td></tr> </tbody> </table> International <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #cccccc;"> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>Address and Zip Match</td></tr> <tr><td>2</td><td>UK Address and Zip Match</td></tr> <tr><td>3</td><td>Address Matched</td></tr> <tr><td>4</td><td>Zip Matched</td></tr> <tr><td>6</td><td>Address and Zip Verified</td></tr> </tbody> </table>	Value	Description	F	Exact Match. 9 digit Match	M	Exact Match. 5 digit Match	A	Address Only	9	9 digit Match	5	5 digit Match	N	No Match	U	Address Unavailable	R	Issuer System Unavailable	X	Ineligible for AVS	S	Service not supported	I	International Card not supported	Value	Description	1	Address and Zip Match	2	UK Address and Zip Match	3	Address Matched	4	Zip Matched	6	Address and Zip Verified
Value	Description																																					
F	Exact Match. 9 digit Match																																					
M	Exact Match. 5 digit Match																																					
A	Address Only																																					
9	9 digit Match																																					
5	5 digit Match																																					
N	No Match																																					
U	Address Unavailable																																					
R	Issuer System Unavailable																																					
X	Ineligible for AVS																																					
S	Service not supported																																					
I	International Card not supported																																					
Value	Description																																					
1	Address and Zip Match																																					
2	UK Address and Zip Match																																					
3	Address Matched																																					
4	Zip Matched																																					
6	Address and Zip Verified																																					

		7	Good Address and Zip Match
		8	Address Not Verified
cvvResponse		Result of Card Security Code validation. Domestic	
		Value	Description
		M	Match
		N	No Match
		P	Not Processed
		S	CVV2 not present on card
		U	Issuer not certified
tranDate		Transaction date. The format of the transaction date is YYYYMMDD	
tranTime		Transaction Time. The format of the transaction time is HHMMSS	

Capture of a Previous Authorization

A Capture of a Previous Authorization transaction submits a capture to the VERePAY switch. This will mark the authorization for settlement. Depending on the processor that is servicing the account, the settlement will either be sent to the processor immediately, or will be marked for batch settlement and then sent to the processor on a schedule.

Request

The following table shows the parameters that make up a capture of a previous authorization transaction request. Required parameters are shown with an “R” in the required column.

Field Name	Required	Value	Description
type	R	Capture or S	The type of transaction being performed
terminal	R	From Portal	The VERePAY terminal number which can be retrieved from the Credential Review page of the VERePAY Portal
storeKey	R	From Portal	The VERePAY terminal key which can be retrieved from the Credential Review page of the VERePAY Portal
vendor	R	bcc	Internal code used by VERePAY
origTranID	R		Original transaction id for the authorization that is to be captured. If the original authorization was submitted through the VERePAY API, this relates to the TranID parameter from the response.
origTranAmount	R		Original transaction amount for the authorization that is to be captured. All amounts are assumed to include 2 decimal places. The decimal point is option

tranAmount	R		Transaction amount to be captured. All amounts are assumed to include 2 decimal places. The decimal point is optional
taxAmount			Tax amount.
localDate			Transaction Date in the format yyyyymmdd
localTime			Transaction Time in the format hhmmss
clientIP			IP address of the customer

Response

The response to a Capture of a Previous Authorization transaction will be returned in the format shown below.

```
result=x,tranID=x,authCode=x.authMessage=x,avsResponse=x,cvvResponse=x,tranDate=x,tranTime=x
```

This should be broken apart into name/value pairs. The response for a Capture of a Previous Authorization transaction will always contain a result parameter. Always test the result first to see if the transaction was successful. A 0 value means the capture was successful. The following table shows all the parameters that make up a Capture of a Previous Authorization response.

Field Name	Value	Description
result	0 or 1	Result of the transaction. A value of 0 denotes that the transaction was successful. A value of 1 denotes that the transaction failed.
tranID		Transaction ID for the transaction. This is required to refund the transaction
authCode		Authorization Code for the transaction
authMessage		Message showing the result of the transaction. This will either be a message generated by the processor or will be a message generated by the VERePAY switch. See Appendix A for VERePAY Messages.
avsResponse		Does not contain a value for a Capture of a Previous Authorization
cvvResponse		Does not contain a value for a Capture of a Previous Authorization
tranDate		Transaction date. The format of the transaction date is YYYYMMDD
tranTime		Transaction Time. The format of the transaction time is HHMMSS

Void of a Previous Authorization

A Void of a Previous Authorization transaction submits a void to the VERePAY switch. This will mark the authorization as Voided. This will prevent the authorization from being settled or refunded.

Request

The following table shows the parameters that make up a void of a previous authorization transaction request. Required parameters are shown with an “R” in the required column.

Field Name	Required	Value	Description
type	R	Void or V	The type of transaction being performed
terminal	R	From Portal	The VERePAY terminal number which can be retrieved from the Credential Review page of the VERePAY Portal
storeKey	R	From Portal	The VERePAY terminal key which can be retrieved from the Credential Review page of the VERePAY Portal
vendor	R	bcc	Internal code used by VERePAY
origTranID	R		Original transaction id for the authorization that is to be voided. If the original authorization was submitted through the VERePAY API, this relates to the TranID parameter from the response.
origTranAmount	R		Original transaction amount for the authorization that is to be voided. All amounts are assumed to include 2 decimal places. The decimal point is option.
localDate			Transaction Date in the format yyyyymmdd
localTime			Transaction Time in the format hhmmss
clientIP			IP address of the customer

Response

The response to a Void of a Previous Authorization transaction will be returned in the format shown below.

```
result=x,tranID=x,authCode=x.authMessage=x,avsResponse=x,cvvResponse=x,tranDate=x,tranTime=x
```

This should be broken apart into name/value pairs. The response for a Void of a Previous Authorization transaction will always contain a result parameter. Always test the result first to see if the transaction was successful. A 0 value means the void was successful. The following table shows all the parameters that make up a Void of a Previous Authorization response.

Field Name	Value	Description
result	0 or 1	Result of the transaction. A value of 0 denotes that the transaction was successful. A value of 1 denotes that the transaction failed.
tranID		Transaction ID for the transaction.
authCode		Authorization Code for the transaction

authMessage		Message showing the result of the transaction. This will either be a message generated by the processor or will be a message generated by the VERePAY switch. See Appendix A for VERePAY Messages.
avsResponse		Does not contain a value for a Void of a Previous Authorization
cvvResponse		Does not contain a value for a Void of a Previous Authorization
tranDate		Transaction date. The format of the transaction date is YYYYMMDD
tranTime		Transaction Time. The format of the transaction time is HHMMSS

Refund of a Previously Settled Transaction

A Refund of a Previously Settled Transaction submits a refund to the VERePAY switch. This will issue a credit against the original transaction. Partial refunds are allowable. Multiple refunds can be sent against a single settled transaction as long as the total amount refunded does not exceed the original settled transaction amount.

Request

The following table shows the parameters that make up a refund of a previously settled transaction request. Required parameters are shown with an “R” in the required column.

Field Name	Required	Value	Description
type	R	Refund or R	The type of transaction being performed
terminal	R	From Portal	The VERePAY terminal number which can be retrieved from the Credential Review page of the VERePAY Portal
storeKey	R	From Portal	The VERePAY terminal key which can be retrieved from the Credential Review page of the VERePAY Portal
vendor	R	bcc	Internal code used by VERePAY
localDate			Transaction Date in the format yyyyymmdd
localTime			Transaction Time in the format hhmmss
origTranID	R		Original transaction id for the authorization that is to be captured
origTranAmount	R		Original transaction amount for the authorization that is to be captured
tranAmount	R		Transaction amount to be captured. All amounts are assumed to include 2 decimal places. The decimal point is optional
taxAmount			Optional tax amount.
clientIP			IP address of the customer

Response

The response to a Refund of a Previously Settled Transaction will be returned in the format shown below.

result=x,tranID=x,authCode=x.authMessage=x,avsResponse=x, cvvResponse=x,tranDate=x,tranTime=x

This should be broken apart into name/value pairs. The response for a Refund of a Previously Settled Transaction will always contain a result parameter. Always test the result first to see if the transaction was successful. A 0 value means the refund was successful. The following table shows all the parameters that make up a Refund of a Previously Settled Transaction response.

Field Name	Value	Description
result	0 or 1	Result of the transaction. A value of 0 denotes that the transaction was successful. A value of 1 denotes that the transaction failed.
tranID		Transaction ID for the transaction.
authCode		Authorization Code for the transaction
authMessage		Message showing the result of the transaction. This will either be a message generated by the processor or will be a message generated by the VERePAY switch. See Appendix A for VERePAY Messages.
avsResponse		Does not contain a value for a Refund of a Previously Settled Transaction
cvvResponse		Does not contain a value for a Refund of a Previously Settled Transaction
tranDate		Transaction date. The format of the transaction date is YYYYMMDD
tranTime		Transaction Time. The format of the transaction time is HHMMSS

Test

A Test Transaction submits a request to determine the status of the VERePAY switch. This will check to see if the VERePAY switch is operational.

Request

The following table shows the parameters that make up a test transaction request. Required parameters are shown with an “R” in the required column.

Field Name	Required	Value	Description
type	R	T or Test	The type of transaction being performed

Response

The response to a Refund of a Test Transaction will be returned in the format shown below.

```
result=0,tranID=,authCode=,authMessage=Service
Operational,avsResponse=,cvvResponse=,tranDate=,tranTime=
```

This should be broken apart into name/value pairs. The response for a Test Transaction will always contain a result parameter. Always test the result first to see if the transaction was successful. A 0 value means the test was successful. The following table shows all the parameters that make up a Test Transaction response.

4. Appendix A – VERePAY Response Messages

Overview

The VERePAY Gateway Switch will sometimes generate its own response messages for all transactions. These may denote a format error with the transaction, a decline of the transaction as a result of fraud checking or a problem that was encountered while processing the transaction. Processors will otherwise generate the response messages.

VERePAY Response Messages

The following table shows messages that VERePAY generates, that are not associated with processor generated messages. These messages will be returned in the authMessage parameter for all transaction types. In addition to these messages, Processor generated messages will normally be returned in the authMessage parameter. The following table shows the importance of the result parameter and authMessage parameter.

Result	Approve/ Decline	Message	Auth Code	Description
0	Approved	Approved and Captured	True	For a terminal that is set up to automatically settle all successful authorizations ,the authorization was approved and then successfully captured for settlement.
0	Approved	Approved but Capture failed. Please Capture manually	True	For a terminal that is set up to automatically settle all successful authorizations, the authorization was approved but there was a problem capturing the transaction for settlement. This means that it will be necessary to manually settle the transaction either by sending a Capture of a Previous Authorization transaction through the

				API or by using either the Virtual Terminal or Transaction Review to settle the transaction through the Portal. Details of the Virtual Terminal and Transaction Review can be found in the VERePAY Portal Merchant User Guide
0	N/A	Service Operational	False	This message will only be returned for a Test transaction. It means that the VERePAY gateway is operational.
1	Declined	Decline AVS and CVV	False	AVS and CVV results were not in the acceptable values defined for the terminal. The VERePAY Gateway Switch restricts AVS and CVV results to prevent fraud and protect the merchant. These settings are made on a terminal by terminal basis.
1	Declined	Decline AVS	False	The AVS result was not in the acceptable values defined for the terminal. The VERePAY Gateway Switch restricts AVS and CVV results to prevent fraud and protect the merchant. These settings are made on a terminal by terminal basis.
1	Declined	Decline CVV	False	The CVV result was not in the acceptable values defined for the terminal. The VERePAY Gateway Switch restricts AVS and CVV results to prevent fraud and protect the merchant. These settings are made on a terminal by terminal basis.
1	Declined	Blocked Card	False	The card number has been blocked in the VERePAY Gateway Switch. The card has been blocked for use at the Merchant site, a Client's set of sites or system wide. This helps prevent fraud by identifying cards that have problems and preventing their use.
1	Format	Format Error	False	An invalid Terminal, Vendor or Store Key was sent in with the transaction. The Terminal and Store Key must match those that are shown on the Credential Review page of the Portal. Vendor must always be bcc.
1	Format	CardNumber Invalid	False	An invalid Card Number was sent in with the transaction. The VERePAY Gateway Switch always validates the

				card number prior to submitting the transaction for processing.
1	Format	Expiry Date Invalid	False	An invalid Expiry Date was sent in with the transaction. The expiry date must be in the format of mmyy
1	Format	Terminal Error	False	The Terminal and Store Key sent in with the transaction are not valid or no processors are defined for the terminal. The Terminal and Store Key must match those that are shown on the Credential Review page of the Portal. A processor must have been set up prior to being able to run transactions through the API. If the terminal and store key are correct, please contact your account representative.
1	Format	Original Transaction ID Invalid	False	For a Refund/Void or Capture, the Original Transaction ID sent in with the transaction is not numeric.
1	Format	Original Transaction Not Found	False	For a Refund/Void or Capture, the Original Transaction ID was not found. The TranID returned with the original authorization (for a Void or Capture) or original capture (for a refund) must be sent.
1	Format	Invalid Original Transaction	False	For a Refund, the original transaction does not have a settled status. For a void or capture the original transaction does not have an authorized status.
1	Format	Tran Amount Invalid	False	The Transaction Amount sent in with the transaction is not in the correct format. All amounts have 2 implied decimals so no decimal point is needed.
1	Format	Tax Amount Invalid	False	The Tax Amount sent in with the transaction is not in the correct format. All amounts have 2 implied decimals so no decimal point is needed.
1	Format	Shipping Amount Invalid	False	The Shipping Amount sent in with the transaction is not in the correct format. All amounts have 2 implied decimals so no decimal point is needed.
1	Format	Vendor Error	False	The Vendor code sent in with the transaction is not a valid vendor. It must be bcc.

5. Appendix B – AVS and CVV Return Codes

Overview

The VERePAY Gateway Switch converts processor AVS and CVV return codes to a single generic set of values. This allows for the simple switching of merchant processors without the need for a merchant to understand all the various values for all the processors.

AVS Return Codes

The following tables shows all the possible AVS return codes that will be returned in the avsResponse parameter for an Authorization transaction. For all other transaction types, the avsResponse will be blank.

Domestic

Value	Description
F	Exact Match. 9 digit Match
M	Exact Match. 5 digit Match
A	Address Only
9	9 digit Match
5	5 digit Match
N	No Match
U	Address Unavailable
R	Issuer System Unavailable
X	Ineligible for AVS
S	Service not supported
I	International Card not supported

International

Value	Description
1	Address and Zip Match
2	UK Address and Zip Match
3	Address Matched
4	Zip Matched
6	Address and Zip Verified
7	Good Address and Zip Match
8	Address Not Verified

CVV Return Codes

The following tables shows all the possible CVV return codes that will be returned in the cvvResponse parameter for an Authorization transaction. For all other transaction types, the cvvResponse will be blank.

Value	Description
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M	Match
N	No Match
P	Not Processed
S	CVV2 not present on card
U	Issuer not certified