

# Magensa Web Service

## MPPGv2 Operations Programmer's Reference Manual

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**Table 0.1 - Revisions**

Rev Number	Date	By	Notes
10	01/29/2016	Donnie James	Initial release.
11	2/25/2016	Rebecca Robinson	Corrected typo on page 21 from “NameOneCard” to “NameOnCard”
20	1/23/2017	Donnie James	Added soapAction to sample request.

## NOTICE

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## Purpose of the document

The purpose of this document is to provide a description of how to call operations of the Magensa Payment Protection Gateway Web Services.

Effective use of the MPPGv2 Web Services enables users to easily integrate encrypted card swipe data into a payment application where the payment application traditionally transmits unencrypted card swipe data when calling web services for a third-party (or ‘target’) service provider.

Users can send Magensa the encapsulated XML (SOAP) or key-value pairs for the third-party service provider, along with encrypted card swipe data from a MagTek MagneSafe reader, and Magensa will decrypt the card swipe data and insert the relevant data, including the unencrypted card data, into the target XML or key-value pairs and call the third-party service provider on behalf of the user. This process will allow a user to support encrypted card swipe data in their payment application without the third-party service provider supporting a decryption service.

The MPPGv2 web service works by decrypting data from a MagneSafe encrypted card swipe and placing the appropriate decrypted data into the target XML or key-value pairs. This is accomplished by using “field replacement variables” that are inserted in-line into the payload. For instance, a target web service might accept a card Primary Account Number (PAN) as an input using the following tag:

<PAN></PAN>

To instruct Magensa to place the decrypted PAN from the card swipe into this tag, the field replacement variable '{CCNum}' would be used as follows:

```
<PAN>{CCNum}</PAN>
```

The currently supported field replacement variables are as follows:

{YY} – year in YY format  
{YYYY} – year in YYYY format  
{MM} – month in MM format  
{CCTrack1} – track1 data (end sentinels not included)  
{CCTrack2} – track2 data (end sentinels not included)  
{CCNum} – credit card Pan  
{MMYYCCExpdt} – expiration date in MMY format  
{MM\_YYCCExpdt} – expiration date in MM/YY format  
{CCName} – Card Holder name

Additional variables will be added from time-to-time. If a particular card data element is required for the target web service you wish to use, please contact [support@magensa.net](mailto:support@magensa.net) to submit a request to have it added to the service.

The MPPGV2 Web Services do not rely on a pre-existing integration between Magensa and the third-party service provider. As long as the third-party service provider uses web services, and Magensa can call those web services on behalf of the user, the third-party service can be used.

In the case where the user has never integrated to the third-party service provider before, it is recommended for the user to integrate to the Decrypt and Forward Web services first, and then certify to the target third-party service provider with Decrypt and Forward in-place.

In order for Magensa to call the third-party service provider, consideration must be given to the following:

- a. Whether Magensa's IP addresses and domain names must be whitelisted with the third-party
- b. Whether client and/or server-side certificates are required.

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# 1 MPPGv2 Operations

## 1.1 ProcessCardSwipe

A command used to decrypt and forward a processed card swipe.

### INPUT PROPERTIES

Property (*)	Value	Value Description
AdditionalRequestData	<string>	A group that contains custom request data required by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
CustomerCode *	<string>	Customer code
Password *	<string>	The password for the credential created and assigned by MagTek.
Username *	<string>	The User Identification credential created and assigned by MagTek.
CustomerTransactionId	<string>	Customer transaction ID
CVV	<string>	Card Verification Value
ZIP	<string>	Zip code
DeviceSN	<string>	Device serial number
KSN *	<string>	Key serial number of the device.
MagnePrint *	<string>	Encrypted MagnePrint
MagnePrintPStatus *	<string>	MagnePrint status
Track1	<string>	Encrypted track1 data
Track2 *	<string>	Encrypted track2 data
Track3	<string>	Encrypted track3 data
Amount *	<string>	Amount of the transaction.
TransactionInputDetails	<string>	A group that contains custom request data required by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionType *	<string>	Transaction type to be used for the transaction. Enum values: SALE

Property (*)	Value	Value Description
		AUTHORIZE CAPTURE VOID REFUND FORCE REJECT

Note: \* = Required

### OUTPUT PROPERTIES

Property	Value	Value Description
AdditionalOutputData	<string>	A group that contains additional output data returned by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
CardID	<string>	Card ID
IsReplay	<string>	Boolean value informing that the KSN has been used in a prior transaction. Enum values: true – KSN has been used in a prior transaction. false – KSN has not been used prior to current transaction.
MagnePrintScore	<string>	MagnePrint score
CustomerTransactionId	<string>	Customer transaction ID
MagTranId	<string>	Magensa assigned unique transaction ID in GUID form.
AVSResult	<string>	Address Verification System result
AuthCode	<string>	Authorization code
AuthorizedAmount	<string>	Authorized amount
CVVResult	<string>	Card Verification Value result
IsTransactionApproved	<string>	Boolean value informing the approval status of the transaction. Enum values: true – Transaction approved false – Transaction not approved
IssuerAuthenticationData	<string>	Issuer authenticate data

Property	Value	Value Description
IssuerScriptTemplate1	<string>	Issuer script template 1
IssuerScriptTemplate2	<string>	Issuer script template 2
TransactionID	<string>	Transaction ID
TransactionMessage	<string>	Transaction Message
TransactionOutputDetails	<string>	A group that contains additional output data returned by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionStatus	<string>	Transaction status
TransactionUTCTimestamp	<string>	Transaction timestamp.

**PROCESSCARDWIPE REQUEST FOR A TARGET WEB SERVICE:**

```

POST https://mppg.magensa.net/v2/MPPGv2Service.svc HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: text/xml; charset=UTF-8
SOAPAction: "http://www.magensa.net/MPPGv2/IMPPGv2Service/ProcessCardSwipe"
Content-Length: 2847
Host: mppg.magensa.net
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:mpp="http://www.magensa.net/MPPGv2/"
xmlns:mpp1="http://schemas.datacontract.org/2004/07/MPPGv2WS.Core"
xmlns:sys="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
  <soapenv:Header/>
  <soapenv:Body>
    <mpp:ProcessCardSwipe>
      <mpp:ProcessCardSwipeRequest>
        <mpp1:AdditionalRequestData>
          <!--Zero or more repetitions:-->
          <sys:KeyValuePairOfstringstring>
            <sys:key></sys:key>
            <sys:value></sys:value>
          </sys:KeyValuePairOfstringstring>
        </mpp1:AdditionalRequestData>
        <mpp1:Authentication>
          <mpp1:CustomerCode>1000000000000000</mpp1:CustomerCode>
          <mpp1:Password>password</mpp1:Password>
          <mpp1:Username>username</mpp1:Username>
        </mpp1:Authentication>
        <mpp1:CardSwipeInput>
          <mpp1:CVV>123</mpp1:CVV>
          <mpp1:EncryptedCardSwipe>
            <mpp1:DeviceSN>B28C0DC</mpp1:DeviceSN>
            <mpp1:KSN>9010010B28C0DC0005AE</mpp1:KSN>
          </mpp1:EncryptedCardSwipe>
        </mpp1:CardSwipeInput>
      </mpp:ProcessCardSwipeRequest>
    </mpp:ProcessCardSwipe>
  </soapenv:Body>
</soapenv:Envelope>

```



```
<mpp1:MagnePrint>43FE284D0EB1D4C3006451AF78947C28AED05C2F9C8433A5D3CCEBC44EE95466F4F1C0B4002FC56DA
F855EF74C72F6A50B41F8935A57BA2C</mpp1:MagnePrint>
  <mpp1:MagnePrintStatus>3162209</mpp1:MagnePrintStatus>

<mpp1:Track1>0A35EFA5A716CAE0FA1FE24F71BF10E6591A1BA78372F06E2F790284101C685B5F5B4790C869380451A73
864048577ECEAF61622AA7E354FEE2F3221D5A4EED510F943A08B1431B5</mpp1:Track1>

<mpp1:Track2>4154691B1D487A62E621B97217312C2B96E82B9CF1E6D9B077C32387DD0DC3D7B26850F1E4FCA27D</mpp
1:Track2>
  <mpp1:Track3></mpp1:Track3>
  </mpp1:EncryptedCardSwipe>
  <mpp1:ZIP>99999</mpp1:ZIP>
</mpp1:CardSwipeInput>
<mpp1:CustomerTransactionID>123</mpp1:CustomerTransactionID>
<mpp1:TransactionInput>
  <mpp1:Amount>1.00</mpp1:Amount>
  <mpp1:TransactionInputDetails>
    <!--Zero or more repetitions:-->
    <sys:KeyValuePairOfstringstring>
      <sys:key></sys:key>
      <sys:value></sys:value>
    </sys:KeyValuePairOfstringstring>
  </mpp1:TransactionInputDetails>
  <mpp1:TransactionType>SALE</mpp1:TransactionType>
</mpp1:TransactionInput>
</mpp:ProcessCardSwipeRequest>
</mpp:ProcessCardSwipe>
</soapenv:Body>
</soapenv:Envelope>
```

### ProcessCardSwipe Response:

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <ProcessCardSwipeResponse xmlns="http://www.magensa.net/MPPGv2/">
      <ProcessCardSwipeResult xmlns:a="http://schemas.datacontract.org/2004/07/MPPGv2WS.Core"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <a:CardSwipeOutput>
          <a:AdditionalOutputData i:nil="true"
xmlns:b="http://schemas.datacontract.org/2004/07/System.Collections.Generic"/>
            <a:CardID i:nil="true"/>
            <a:IsReplay>false</a:IsReplay>
            <a:MagnePrintScore>.953</a:MagnePrintScore>
          </a:CardSwipeOutput>
          <a:CustomerTransactionID>123</a:CustomerTransactionID>
          <a:MagTranID>75e345ad-0fef-44e4-b0f1-b7fa566aea9b</a:MagTranID>
          <a:TransactionOutput>
            <a:AVSResult>Y</a:AVSResult>
            <a:AuthCode>TEST63</a:AuthCode>
            <a:AuthorizedAmount i:nil="true"/>
            <a:CVVResult>P</a:CVVResult>
            <a:IsTransactionApproved>true</a:IsTransactionApproved>
            <a:IssuerAuthenticationData i:nil="true"/>
            <a:IssuerScriptTemplate1 i:nil="true"/>
            <a:IssuerScriptTemplate2 i:nil="true"/>
            <a:TransactionID>000000000000000837</a:TransactionID>
            <a:TransactionMessage>APPROVED</a:TransactionMessage>
            <a:TransactionOutputDetails
xmlns:b="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
              <b:KeyValuePairOfstringstring>
                <b:key>ProcessorResponse</b:key>
                <b:value><![CDATA[HTTP/1.1 200 OKVary: Accept-Encoding
```

```

Keep-Alive: timeout=5, max=1000
Connection: Keep-Alive
Transfer-Encoding: chunked
Content-Type: text/plain; charset=UTF-8
Date: Thu, 03 Dec 2015 19:26:29 GMT
Server: Apache

<<JetPayResponse Version="2.0"><TransactionID>00000000000000837</TransactionID>
<ActionCode>000</ActionCode>
<Approval>TEST63</Approval>
<CVV2>P</CVV2>
<ResponseText>APPROVED</ResponseText>
<UniqueID>QkVkVbRnQnQiPhQbRmRbPoPh</UniqueID>
<RRN>123456789012</RRN>
<RawResponseCode>00</RawResponseCode>
<AddressMatch>Y</AddressMatch>
<ZipMatch>Y</ZipMatch>
<AVS>Y</AVS>
</JetPayResponse>]]></b:value>
    </b:KeyValuePairOfStringstring>
  </a:TransactionOutputDetails>
  <a:TransactionStatus>000</a:TransactionStatus>
</a:TransactionOutput>
  <a:TransactionUTCTimestamp>2015-12-03 19:26:28Z</a:TransactionUTCTimestamp>
</ProcessCardSwipeResult>
</ProcessCardSwipeResponse>
</s:Body>
</s:Envelope>

```

## 1.2 ProcessEMVSRED

A command used to decrypt and forward an EMV transaction.

### INPUT PROPERTIES

Property (*)	Value	Value Description
AdditionalRequestData	<string>	A group that contains custom request data required by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfStringstring>. See examples.
CustomerCode *	<string>	Customer code
Password *	<string>	The password for the credential created and assigned by MagTek.
Username *	<string>	The User Identification credential created and assigned by MagTek.
CustomerTransactionId	<string>	Customer transaction ID
EMVSREDData *	<string>	Encrypted EMV transaction data (ARQC) from device to send to the processor.
EncryptionType *	<string>	The encrypted transaction data encryption type used for EMVSREDData.

Property (*)	Value	Value Description
		80 = DUKPT Key Data Variant 81 = DUKPT Key PIN Variant
KSN *	<string>	Key serial number of the device.
NumberOfPaddedBytes *	<string>	Number of bytes padded to the end of the decrypted EMVSREDDData to make a multiple of 8 bytes.
PaymentMode *	<string>	Mode of the transaction payment. Use value EMV. Enum values: EMV MagStripe
Amount *	<string>	Amount of the transaction.
TransactionInputDetails	<string>	A group that contains custom request data required by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionType *	<string>	Transaction type to be used for the transaction. Enum values: SALE AUTHORIZE CAPTURE VOID REFUND FORCE REJECT

Note: \* = Required

### OUTPUT PROPERTIES

Property	Value	Value Description
CustomerTransactionId	<string>	Customer transaction ID
AdditionalOutputData	<string>	A group that contains additional output data returned by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
CardID	<string>	Card ID
IsReplay	<string>	Boolean value informing that the KSN has been used in a prior transaction. Enum values:

Property	Value	Value Description
		true – KSN has been used in a prior transaction. false – KSN has not been used prior to current transaction.
MagTranId	<string>	Magensa assigned unique transaction ID in GUID form.
AVSResult	<string>	Address Verification System result
AuthCode	<string>	Authorization code
AuthorizedAmount	<string>	Authorized amount
CVVResult	<string>	Card Verification Value result
IsTransactionApproved	<string>	Boolean value informing the approval status of the transaction. Enum values: true – Transaction approved false – Transaction not approved
IssuerAuthenticationData	<string>	Issuer authenticate data
IssuerScriptTemplate1	<string>	Issuer script template 1
IssuerScriptTemplate2	<string>	Issuer script template 2
TransactionID	<string>	Transaction ID
TransactionMessage	<string>	Transaction Message
TransactionOutputDetails	<string>	A group that contains additional output data returned by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionStatus	<string>	Transaction status
TransactionUTCTimestamp	<string>	Transaction timestamp.

**PROCESSEMVSRD REQUEST FOR A TARGET WEB SERVICE:**

```
POST https://mppg.magensa.net/v2/MPPGv2Service.svc HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: text/xml;charset=UTF-8
SOAPAction: "http://www.magensa.net/MPPGv2/IMPpGv2Service/ProcessEMVSRED"
Content-Length: 2197
Host: mppg.magensa.net
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:mpp="http://www.magensa.net/MPPGv2/"
xmlns:mpp1="http://schemas.datacontract.org/2004/07/MPPGv2WS.Core"
xmlns:sys="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
  <soapenv:Header/>
```

```

<soapenv:Body>
  <mpp:ProcessEMVSRED>
    <mpp:ProcessEMVSREDRequest>
      <mpp1:AdditionalRequestData/>
      <mpp1:Authentication>
        <mpp1:CustomerCode>1000000000000000</mpp1:CustomerCode>
        <mpp1:Password>password</mpp1:Password>
        <mpp1:Username>username</mpp1:Username>
      </mpp1:Authentication>
      <mpp1:CustomerTransactionID>123</mpp1:CustomerTransactionID>
      <mpp1:EMVSREDInput>
<mpp1:EMVSREDData>E60A6C69C3DBB68C0AA285D05003407CC6895CBF8101410189962D1A9A5DAEB01B590E830CD26594
AE3D00446CF7BF002A25596AE7373BB21BA628736B93A994FE734CC5197AD59932CEADC8CB5492E40337FFDAA87BF3F61A
866D68B98FD9A67FD2D9DB8569B98A8E019097252F26F4A867BA89C1A4824B8907ACBE4C7882FAE2772ECB11F9DE606118
D8FE1FAC778AFE97E1665B880B4CB45E033092909C0AE6107C8F374AD20DF7DF32B48BA9EDCCD379D4A9DA57E44357E171
573D29A2310EB6A431A918DEA6A5921750CC090CB329AAABF6515A4066E9EC36A2237E33AF${-
Properties#EMVTransactionComplete}</mpp1:EMVSREDData>
      <mpp1:EncryptionType>80</mpp1:EncryptionType>
      <mpp1:KSN>9500030000000120014B</mpp1:KSN>
      <mpp1:NumberOfPaddedBytes>4</mpp1:NumberOfPaddedBytes>
      <mpp1:PaymentMode>EMV</mpp1:PaymentMode>
    </mpp1:EMVSREDInput>
    <mpp1:TransactionInput>
      <mpp1:Amount>1.00</mpp1:Amount>
      <mpp1:TransactionInputDetails/>
      <mpp1:TransactionType>SALE</mpp1:TransactionType>
    </mpp1:TransactionInput>
  </mpp:ProcessEMVSREDRequest>
</mpp:ProcessEMVSRED>
</soapenv:Body>
</soapenv:Envelope>

```

### ProcessEMVSRED Response:

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <ProcessEMVSREDResponse xmlns="http://www.magensa.net/MPPGv2/">
      <ProcessEMVSREDResult xmlns:a="http://schemas.datacontract.org/2004/07/MPPGv2WS.Core"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <a:CustomerTransactionID>123</a:CustomerTransactionID>
        <a:EMVSREDData>
          <a:AdditionalOutputData i:nil="true"
xmlns:b="http://schemas.datacontract.org/2004/07/System.Collections.Generic"/>
          <a:CardID i:nil="true"/>
          <a:IsReplay>>false</a:IsReplay>
        </a:EMVSREDData>
        <a:MagTranID>e913c51e-75cd-48c7-9acc-180be6a759a4</a:MagTranID>
        <a:TransactionOutput>
          <a:AVSResult i:nil="true"/>
          <a:AuthCode>TEST51</a:AuthCode>
          <a:AuthorizedAmount i:nil="true"/>
          <a:CVVResult i:nil="true"/>
          <a:IsTransactionApproved>true</a:IsTransactionApproved>
          <a:IssuerAuthenticationData>472AD94F9FEC47D3030</a:IssuerAuthenticationData>
          <a:IssuerScriptTemplate1 i:nil="true"/>
<a:IssuerScriptTemplate2>9F180430303031860E04DA9F580903C0DC6EF04E9C8A09860E04DA9F590908460C835744C
E4E5C</a:IssuerScriptTemplate2>
          <a:TransactionID>000000000000000262</a:TransactionID>
          <a:TransactionMessage>APPROVED</a:TransactionMessage>
          <a:TransactionOutputDetails
xmlns:b="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
            <b:KeyValuePairOfstringstring>
              <b:key>ProcessorResponse</b:key>
              <b:value><![CDATA[HTTP/1.1 200 OKVary: Accept-Encoding

```

```
Transfer-Encoding: chunked
Content-Type: text/plain; charset=UTF-8
Date: Thu, 03 Dec 2015 19:58:33 GMT
Server: Apache

&<JetPayResponse Version="2.0"><TransactionID>00000000000000262</TransactionID>
<ActionCode>000</ActionCode>
<Approval>TEST51</Approval>
<ResponseText>APPROVED</ResponseText>
<UniqueID>QkVkVbRnQnQiPhQbUcShPoUj</UniqueID>
<RRN>123456789012</RRN>
<RawResponseCode>00</RawResponseCode>
<ICC><EMVTag_9F36>0035</EMVTag_9F36>
<EMVTag_91>472AD94F9FECD47D3030</EMVTag_91>
<EMVTag_72>9F180430303031860E04DA9F580903C0DC6EF04E9C8A09860E04DA9F590908460C835744CE4E5C</EMVTag_
72>
</ICC>
</JetPayResponse>]]></b:value>
    </b:KeyValuePairOfstringstring>
    </a:TransactionOutputDetails>
    <a:TransactionStatus>000</a:TransactionStatus>
    </a:TransactionOutput>
    <a:TransactionUTCTimestamp>2015-12-03 19:58:32Z</a:TransactionUTCTimestamp>
  </ProcessEMVSREDResult>
</ProcessEMVSREDResponse>
</s:Body>
</s:Envelope>
```

## 1.2 ProcessReferenceID

A command used to process a prior transaction by referencing the Transaction ID.

### INPUT PROPERTIES

Property (*)	Value	Value Description
AdditionalRequestData	<string>	A group that contains custom request data required by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
CustomerCode *	<string>	Customer code
Password *	<string>	The password for the credential created and assigned by MagTek.
Username *	<string>	The User Identification credential created and assigned by MagTek.
CustomerTransactionId	<string>	Customer transaction ID
Amount *	<string>	Amount of the transaction.

Property (*)	Value	Value Description
TransactionInputDetails	<string>	A group that contains custom request data required by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionType *	<string>	Transaction type to be used for the transaction. Enum values: CAPTURE VOID REFUND FORCE REJECT
ReferenceAuthCode	<string>	Authorization code of a prior transaction.
ReferenceTransactionID *	<string>	Transaction ID of a prior transaction.

Note: \* = Required

### OUTPUT PROPERTIES

Property	Value	Value Description
CustomerTransactionId	<string>	Customer transaction ID
MagTranId	<string>	Magensa assigned unique transaction ID in GUID form.
AVSResult	<string>	Address Verification System result
AuthCode	<string>	Authorization code
AuthorizedAmount	<string>	Authorized amount
CVVResult	<string>	Card Verification Value result
IsTransactionApproved	<string>	Boolean value informing the approval status of the transaction. Enum values: true – Transaction approved false – Transaction not approved
IssuerAuthenticationData	<string>	Issuer authenticate data
IssuerScriptTemplate1	<string>	Issuer script template 1
IssuerScriptTemplate2	<string>	Issuer script template 2

Property	Value	Value Description
TransactionID	<string>	Transaction ID
TransactionMessage	<string>	Transaction Message
TransactionOutputDetails	<string>	A group that contains additional output data returned by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionStatus	<string>	Transaction status
TransactionUTCTimestamp	<string>	Transaction timestamp.

**PROCESSREFERENCEID REQUEST FOR A TARGET WEB SERVICE:**

```

POST https://mppg.magensa.net/v2/MPPGv2Service.svc HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: text/xml;charset=UTF-8
SOAPAction: "http://www.magensa.net/MPPGv2/IMPpGv2Service/ProcessReferenceID"
Content-Length: 2272
Host: mppg.magensa.net
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:mpp="http://www.magensa.net/MPPGv2/"
xmlns:mpp1="http://schemas.datacontract.org/2004/07/MPPGv2WS.Core"
xmlns:sys="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
  <soapenv:Header/>
  <soapenv:Body>
    <mpp:ProcessReferenceID>
      <mpp:ProcessReferenceIDRequest>
        <mpp1:AdditionalRequestData>
          <sys:KeyValuePairOfstringstring>
            <sys:key></sys:key>
            <sys:value></sys:value>
          </sys:KeyValuePairOfstringstring>
        </mpp1:AdditionalRequestData>
        <mpp1:Authentication>
          <mpp1:CustomerCode>1000000000000001</mpp1:CustomerCode>
          <mpp1:Password>password</mpp1:Password>
          <mpp1:Username>username</mpp1:Username>
        </mpp1:Authentication>
        <mpp1:CustomerTransactionID>123</mpp1:CustomerTransactionID>
        <mpp1:TransactionInput>
          <mpp1:Amount>1.00</mpp1:Amount>
          <mpp1:TransactionInputDetails>
            <sys:KeyValuePairOfstringstring>
              <sys:key>CCTrack1</sys:key>
              <sys:value>B4555555555555584^JETPAY/MAGENSA^161210100000000004960000000000</sys:value>
            </sys:KeyValuePairOfstringstring>
            <sys:KeyValuePairOfstringstring>
              <sys:key>CCTrack2</sys:key>
              <sys:value>4555555555555584=16121010000000000496</sys:value>
            </sys:KeyValuePairOfstringstring>
          </mpp1:TransactionInputDetails>
          <mpp1:TransactionType>VOID</mpp1:TransactionType>
          <mpp1:ReferenceAuthCode></mpp1:ReferenceAuthCode>
          <mpp1:ReferenceTransactionID>000000000000000369</mpp1:ReferenceTransactionID>
        </mpp1:TransactionInput>
      </mpp:ProcessReferenceIDRequest>
    </mpp:ProcessReferenceID>
  </soapenv:Body>
</soapenv:Envelope>

```



```
    </mopl:TransactionInput>
  </mpp:ProcessReferenceIDRequest>
</mpp:ProcessReferenceID>
</soapenv:Body>
</soapenv:Envelope>
```

### ProcessEMVSRED Response:

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <ProcessReferenceIDResponse xmlns="http://www.magensa.net/MPPGv2/">
      <ProcessReferenceIDResult xmlns:a="http://schemas.datacontract.org/2004/07/MPPGv2WS.Core"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <a:CustomerTransactionID>123</a:CustomerTransactionID>
        <a:MagTranID>983cc7c4-5b57-421b-a512-73927fe2bbf9</a:MagTranID>
        <a:TransactionOutput>
          <a:AVSResult i:nil="true"/>
          <a:AuthCode>TEST79</a:AuthCode>
          <a:AuthorizedAmount i:nil="true"/>
          <a:CVVResult i:nil="true"/>
          <a:IsTransactionApproved>true</a:IsTransactionApproved>
          <a:IssuerAuthenticationData i:nil="true"/>
          <a:IssuerScriptTemplate1 i:nil="true"/>
          <a:IssuerScriptTemplate2 i:nil="true"/>
          <a:TransactionID>0000000000000000000369</a:TransactionID>
          <a:TransactionMessage>APPROVED</a:TransactionMessage>
          <a:TransactionOutputDetails
xmlns:b="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
            <b:KeyValuePairOfstringstring>
              <b:key>ProcessorResponse</b:key>
              <b:value><![CDATA[HTTP/1.1 200 OKVary: Accept-Encoding
Transfer-Encoding: chunked
Content-Type: text/plain; charset=UTF-8
Date: Thu, 24 Dec 2015 00:08:02 GMT
Server: Apache

&<JetPayResponse Version="2.0"><TransactionID>0000000000000000000369</TransactionID>
<ActionCode>000</ActionCode>
<Approval>TEST79</Approval>
<ResponseText>APPROVED</ResponseText>
<UniqueID>QkVhWbUnQnQiRoPkPcPiQkUm</UniqueID>
<RRN>535700004530</RRN>
<RawResponseCode>00</RawResponseCode>
</JetPayResponse]]></b:value>
            </b:KeyValuePairOfstringstring>
          </a:TransactionOutputDetails>
          <a:TransactionStatus>000</a:TransactionStatus>
        </a:TransactionOutput>
        <a:TransactionUTCTimestamp>2015-12-24 00:08:02Z</a:TransactionUTCTimestamp>
      </ProcessReferenceIDResult>
    </ProcessReferenceIDResponse>
  </s:Body>
</s:Envelope>
```

## 1.3 ProcessManualEntry

A command used to decrypt and forward a manually entered card data transaction.

**INPUT PROPERTIES**

Property (*)	Value	Value Description
AdditionalRequestData	<string>	A group that contains custom request data required by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
CustomerCode *	<string>	Customer code
Password *	<string>	The password for the credential created and assigned by MagTek.
Username *	<string>	The User Identification credential created and assigned by MagTek.
CustomerTransactionId	<string>	Customer transaction ID
AddressLine1	<string>	Line 1 of address.
AddressLine2	<string>	Line 2 of address.
CVV	<string>	Card Verification Value
City	<string>	City
Country	<string>	Country
ExpirationDate *	<string>	Expiration date
NameOnCard	<string>	Cardholder's name
PAN *	<string>	Primary Account Number
State	<string>	State
ZIP	<string>	Zip code
Amount *	<string>	Amount of the transaction.
TransactionInputDetails	<string>	A group that contains custom request data required by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionType *	<string>	Transaction type to be used for the transaction. Enum values: SALE

Note: \* = Required

**OUTPUT PROPERTIES**

Property	Value	Value Description
CustomerTransactionId	<string>	Customer transaction ID
MagTranId	<string>	Magensa assigned unique transaction ID in GUID form.
AVSResult	<string>	Address Verification System result
AuthCode	<string>	Authorization code
AuthorizedAmount	<string>	Authorized amount
CVVResult	<string>	Card Verification Value result
IsTransactionApproved	<string>	Boolean value informing the approval status of the transaction. Enum values: true – Transaction approved false – Transaction not approved
IssuerAuthenticationData	<string>	Issuer authenticate data
IssuerScriptTemplate1	<string>	Issuer script template 1
IssuerScriptTemplate2	<string>	Issuer script template 2
TransactionID	<string>	Transaction ID
TransactionMessage	<string>	Transaction Message
TransactionOutputDetails	<string>	A group that contains additional output data returned by the target web service. Elements are expressed as Key/Value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionStatus	<string>	Transaction status
TransactionUTCTimestamp	<string>	Transaction timestamp.

**PROCESSMANUALENTRY REQUEST FOR A TARGET WEB SERVICE:**

```
POST https://mppg.magensa.net/v2/MPPGv2Service.svc HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: text/xml; charset=UTF-8
SOAPAction: "http://www.magensa.net/MPPGv2/IMPPGv2Service/ProcessManualEntry"
Content-Length: 2476
Host: mppg.magensa.net
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:mpp="http://www.magensa.net/MPPGv2/"
```

```
xmlns:mpp1="http://schemas.datacontract.org/2004/07/MPPGv2WS.Core"
xmlns:sys="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
  <soapenv:Header/>
  <soapenv:Body>
    <mpp:ProcessManualEntry>
      <mpp:ProcessManualEntryRequest>
        <mpp1:AdditionalRequestData>
          <!--Zero or more repetitions:-->
          <sys:KeyValuePairOfstringstring>
            <sys:key></sys:key>
            <sys:value></sys:value>
          </sys:KeyValuePairOfstringstring>
        </mpp1:AdditionalRequestData>
        <mpp1:Authentication>
          <mpp1:CustomerCode>1000000000000000</mpp1:CustomerCode>
          <mpp1:Password>password</mpp1:Password>
          <mpp1:Username>username</mpp1:Username>
        </mpp1:Authentication>
        <mpp1:CustomerTransactionID>1234</mpp1:CustomerTransactionID>
        <mpp1:ManualEntryInput>
          <mpp1:AddressLine1></mpp1:AddressLine1>
          <mpp1:AddressLine2></mpp1:AddressLine2>
          <mpp1:CVV>123</mpp1:CVV>
          <mpp1:City></mpp1:City>
          <mpp1:Country></mpp1:Country>
          <mpp1:ExpirationDate>1612</mpp1:ExpirationDate>
          <mpp1:NameOnCard>JETPAY/MAGENSA</mpp1:NameOnCard>
          <mpp1:PAN>4555555555555584</mpp1:PAN>
          <mpp1:State></mpp1:State>
          <mpp1:ZIP>99999</mpp1:ZIP>
        </mpp1:ManualEntryInput>
        <mpp1:TransactionInput>
          <mpp1:Amount>1.00</mpp1:Amount>
          <mpp1:TransactionInputDetails>
            <!--Zero or more repetitions:-->
            <sys:KeyValuePairOfstringstring>
              <sys:key></sys:key>
              <sys:value></sys:value>
            </sys:KeyValuePairOfstringstring>
          </mpp1:TransactionInputDetails>
          <mpp1:TransactionType>SALE</mpp1:TransactionType>
        </mpp1:TransactionInput>
      </mpp:ProcessManualEntryRequest>
    </soapenv:Body>
  </soapenv:Envelope>
```

### ProcessCardSwipe Response:

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <ProcessManualEntryResponse xmlns="http://www.magensa.net/MPPGv2/">
      <ProcessManualEntryResult xmlns:a="http://schemas.datacontract.org/2004/07/MPPGv2WS.Core"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <a:CustomerTransactionID>1234</a:CustomerTransactionID>
        <a:MagTranID>36f03b94-5f39-4bfa-ba0e-cb44ed7fc27b</a:MagTranID>
        <a:TransactionOutput>
          <a:AVSResult>Y</a:AVSResult>
          <a:AuthCode>TEST93</a:AuthCode>
          <a:AuthorizedAmount i:nil="true"/>
          <a:CVVResult>P</a:CVVResult>
          <a:IsTransactionApproved>true</a:IsTransactionApproved>
          <a:IssuerAuthenticationData i:nil="true"/>
        </a:TransactionOutput>
      </ProcessManualEntryResult>
    </ProcessManualEntryResponse>
  </s:Body>
</s:Envelope>
```

```
    <a:IssuerScriptTemplate1 i:nil="true"/>
    <a:IssuerScriptTemplate2 i:nil="true"/>
    <a:TransactionID>00000000000001227</a:TransactionID>
    <a:TransactionMessage>APPROVED</a:TransactionMessage>
    <a:TransactionOutputDetails
xmlns:b="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
      <b:KeyValuePairOfstringstring>
        <b:key>ProcessorResponse</b:key>
        <b:value><![CDATA[HTTP/1.1 200 OKVary: Accept-Encoding
Transfer-Encoding: chunked
Content-Type: text/plain; charset=UTF-8
Date: Fri, 29 Jan 2016 18:36:22 GMT
Server: Apache

&<JetPayResponse Version="2.0"><TransactionID>00000000000001227</TransactionID>
<ActionCode>000</ActionCode>
<Approval>TEST93</Approval>
<CVV2>P</CVV2>
<ResponseText>APPROVED</ResponseText>
<UniqueID>QkVhTkSkQmPjRbQcSmRiWkRj</UniqueID>
<RRN>123456789012</RRN>
<RawResponseCode>00</RawResponseCode>
<AddressMatch>Y</AddressMatch>
<ZipMatch>Y</ZipMatch>
<AVS>Y</AVS>
</JetPayResponse]]></b:value>
      </b:KeyValuePairOfstringstring>
    </a:TransactionOutputDetails>
    <a:TransactionStatus>000</a:TransactionStatus>
  </a:TransactionOutput>
  <a:TransactionUTCTimestamp>2016-01-29 18:36:22Z</a:TransactionUTCTimestamp>
</ProcessManualEntryResult>
</ProcessManualEntryResponse>
</s:Body>
</s:Envelope>
```

## 2 Status Codes and Messages

Status Codes and Messages returned by Magensa for MPPGv2 Operations

Internal errors

Code	StatusMsg	Notes
1000	Success	
5000	Unknown Error	

Input Validation errors

Code	StatusMsg	Notes
602	KSN is required	
603	CustomerCode is required	
604	Username is required	
605	Password is required	
607	KSN is not valid	
610	EncryptedTrack2 is required	
611	EncryptedMP is required	
612	EncryptedData is required	
615	CustomerTransactionID is not valid	
617	CVV is not valid	
618	ZIP is not valid	
619	Amount is not valid	
628	PAN is not valid	
629	ExpirationDate is not valid	
630	NameOnCard is not valid	
631	AddressLine1 is not valid	
632	AddressLine2 is not valid	
633	City is not valid	
634	State is not valid	
635	Country is not valid	
701	Access Denied	
708	EncryptionType is required	
712	Decrypt web service failed	
716	Invalid Track data after Decryption	