

# **MPPGv3**

## **Magensa Payment Protection Gateway version 3.0** **Programmer's Reference Manual**

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## Revisions

Rev Number	Date	By	Notes
20	07/30/18	Roger Applewhite	Inserted paragraph on Partial Authorization.
10	06/29/2017	Donnie James	Initial release.

## Table of Contents

Purpose of the document .....	5
1 MPPGv3 Operations .....	6
1.1 ProcessCardSwipe .....	6
Input Properties .....	6
Output Properties .....	7
Sample ProcessCardSwipe Request .....	8
Sample ProcessCardSwipe Response .....	9
1.2 ProcessEMVSRED .....	12
Input Properties .....	12
Output Properties .....	13
Sample ProcessEMVSRED Request .....	14
Sample ProcessEMVSRED Response .....	16
1.3 ProcessReferenceID .....	19
Input Properties .....	19
Output Properties .....	19
Sample ProcessReferenceID Request .....	20
Sample ProcessReferenceID Response .....	21
1.4 ProcessManualEntry .....	24
Input Properties .....	24
Output Properties .....	25
Sample ProcessManualEntry Request.....	25
Sample ProcessManualEntry Response .....	27
1.5 ProcessToken .....	29
Input Properties .....	29
Output Properties .....	30
Sample ProcessToken Request.....	30
Sample ProcessToken Response .....	32
2 Fault Codes and Reasons.....	34

## Purpose of the document

The purpose of this document is to describe the various operations available in MPPG v3 and their required or optional input & output parameters. It also provides sample SOAP request & response as reference for client developers.

MPPGv3 enables clients to easily integrate encrypted & secure payment data from MagTek devices into their payment applications. This helps mitigate the risks associated with transmission of PCI-sensitive payment data to third-party (or 'target') service providers.

Clients call specific MPPGv3 operations (based on payment mode e.g. card-swipe, EMV, manual entry, reference-id, token etc.) with corresponding encrypted & secure payment data and transaction information. The service, upon successful authentication of the client credentials, decrypts the payment data, builds the transaction request, sends it to the third-party service provider, parses the response and returns the results of the operation to the client. Please check if your payment processor is supported by MPPGv3 as a third-party service provider.

For SALE and AUTHORIZE transactions, Partial Authorization is set to TRUE. This will cause the card issuing bank to authorize up to the amount remaining in the cardholder's account, even if this is less than the amount requested. The remainder must be collected by another means. Therefore, it is important to always check "AuthorizedAmount" in the output. It may be less than "Amount" requested in the input. For more information regarding the behavior of Partial Authorization or to disable it, please contact [support@magensa.net](mailto:support@magensa.net).

All transaction-related information should be provided in the TransactionInput element. And any information other than processor name, transaction type and amount should be provided as key-value pair elements in TransactionInputDetails. The building of transaction requests is template-driven through use of tags and therefore if the payment processor requires this data, the client will have to provide key-value pairs such as key = "LocalDateTime", value = "2017-05-11 12:00:00Z". MPPGv3 will replace the key-tag of "LocalDateTime" in the template with the value provided as part of building the request. Please consult your payment processor API for the correct key string-literals.

A unique, new feature introduced in MPPGv3 is the ability to send a "batch" of requests in a single call to the service. As a result, all MPPGv3 service operations take in an array of requests and return an array of responses. The service processes these input requests serially and a specific index/element of response corresponds to the specific index/element of request. All responses have an MPPGv3WSFault element and in the case of an error or exception raised for that particular request, the details will be available in the corresponding MPPGv3Fault element. When successful, the value of this MPPGv3WSFault element will be null.

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

# 1 MPPGv3 Operations

## 1.1 ProcessCardSwipe

This operation processes a batch of ProcessCardSwipeRequest elements for card-swipe payment mode.

### INPUT PROPERTIES

Property (* required)	Type	Description
AdditionalRequestData	Array of key / value	Contains custom request data required by the target service provider. Elements are expressed as key/value pairs grouped under <KeyValuePairOfstringstring>. See sample request.
Amount *	Decimal	Amount for transaction in units (dollars or cents) as per target service provider's API
CustomerCode *	String	Customer code for credential assigned by Magensa
CustomerTransactionID	String	Client-assigned transaction ID for easy cross-reference
CVV	String	Card verification value
DeviceSN	String	MagTek device serial number
KSN *	String	Key serial number
MagnePrint *	String	Encrypted MagnePrint
MagnePrintPStatus *	String	MagnePrint status
Password *	String	Password for credential assigned by Magensa
ProcessorName *	String	Magensa assigned name for third-party service provider
Track1	String	Encrypted track 1 data
Track2 *	String	Encrypted track 2 data
Track3	String	Encrypted track 3 data
TransactionInputDetails	Array of key / value	Contains transaction information required by the target service provider. Elements are expressed as key/value pairs grouped under <KeyValuePairOfstringstring>. See examples
TransactionType *	String	Transaction type: SALE, AUTHORIZE, CAPTURE, VOID, REFUND, FORCE, REJECT, TOKEN
Username *	String	Username for credential assigned by Magensa
ZIP	String	Zip code

Note: \* = Required

## OUTPUT PROPERTIES

Property	Type	Description
AdditionalOutputData	Array of key / value	Contains additional output data. Elements are expressed as key / value pairs grouped under <KeyValuePairOfstringstring>. See examples
AuthCode	String	Authorization code from target service provider.
AuthorizedAmount	Decimal	Authorized amount from target service provider.
AVSResult	String	Address Verification System result from target service provider.
CardID	String	Card ID from Magensa.
CustomerTransactionID	String	Client-assigned transaction ID from input.
CVVResult	String	Card Verification Value result from target service provider.
IsReplay	Boolean	Boolean value indicating prior use of KSN from Magensa.
IssuerAuthenticationData	String	Issuer authenticate data from target service provider.
IssuerScriptTemplate1	String	Issuer script template 1 from target service provider.
IssuerScriptTemplate2	String	Issuer script template 2 from target service provider.
IsTransactionApproved	Boolean	Boolean value indicating approval status of the transaction.
MagnePrintScore	Decimal	MagnePrint score from Magensa.
MagTranID	String	Transaction ID (GUID) from Magensa.
MPPGv3WSFault	String	Contains FaultCode, FaultReason and additional details when error encountered while processing particular request. Otherwise is null
Token	String	Token if target service provider is Magensa's Token web service.
TransactionID	String	Transaction ID from target service provider.
TransactionMessage	String	Transaction Message from target service provider.
TransactionOutputDetails	Array of key / value	Contains additional output data returned by the target service provider. Elements are expressed as key / value pairs grouped under <KeyValuePairOfstringstring>. See examples
TransactionStatus	String	Transaction status from target service provider.
TransactionUTCTimestamp	String	Transaction timestamp from Magensa.

## SAMPLE PROCESSCARDWIPE REQUEST

```

POST https://mppg.magensa.net/v3/MPPGv3Service.svc HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: text/xml; charset=UTF-8
SOAPAction: "http://www.magensa.net/MPPGv3/IMPPGv3Service/ProcessCardSwipe"
Content-Length: 5021
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/MPPGv3/"
xmlns:mpp1="http://schemas.datacontract.org/2004/07/MPPGv3WS.Core"
xmlns:sys="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
  <soapenv:Header/>
  <soapenv:Body>
    <mpp:ProcessCardSwipe>
      <mpp:ProcessCardSwipeRequests>
        <mpp1:ProcessCardSwipeRequest>
          <mpp1:AdditionalRequestData>
            <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>9010010B28C0DC0000FB</mpp1:KSN>

            <mpp1:MagnePrint>0144A62C8A18203BE697334D96B27BC5EE2B93F79FF157C338C2C695825BF69C19197760D4B65ADD5
14A4B69C38075977A3576AF3E5A796E</mpp1:MagnePrint>
              <mpp1:MagnePrintStatus>61403000</mpp1:MagnePrintStatus>

            <mpp1:Track1>3C187B54C85E49294BAA284D8B5F4B8C4B3EE2AF7C409E0DF8AAF85C5EE9D5D95438C4B580B72EC30BA19
97945EB2B9B9843400C9ED2D53A5FE55E5C0FDF60E42C62053230551CEF</mpp1:Track1>

            <mpp1:Track2>080E3EA5606A8FF01ADE6FF9DC5C820E1A6932A9EA36297921E2CC7E3F9BD9CB6FF553D33E6FE45D</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>100</mpp1:Amount>
            <mpp1:ProcessorName>Jet Pay</mpp1:ProcessorName>
            <mpp1:TransactionInputDetails>
              <sys:KeyValuePairOfstringstring>
                <sys:key></sys:key>
                <sys:value></sys:value>
              </sys:KeyValuePairOfstringstring>
            </mpp1:TransactionInputDetails>
            <mpp1:TransactionType>SALE</mpp1:TransactionType>
          </mpp1:TransactionInput>
        </mpp1:ProcessCardSwipeRequest>
      </mpp:ProcessCardSwipeRequests>
    </mpp:ProcessCardSwipe>
  </soapenv:Body>
</soapenv:Envelope>

```



```

        <mpp1:AdditionalRequestData>
            <sys:KeyValuePairOfstringstring>
                <sys:key></sys:key>
                <sys:value></sys:value>
            </sys:KeyValuePairOfstringstring>
        </mpp1:AdditionalRequestData>
        <mpp1:Authentication>
            <mpp1:CustomerCode>9900000000000002</mpp1:CustomerCode>
            <mpp1:Password>password</mpp1:Password>
            <mpp1:Username>MPPGWSSTestUser</mpp1:Username>
        </mpp1:Authentication>
        <mpp1:CardSwipeInput>
            <mpp1:CVV>123</mpp1:CVV>
            <mpp1:EncryptedCardSwipe>
                <mpp1:DeviceSN>B28C0DC</mpp1:DeviceSN>
                <mpp1:KSN>9010010B28C0DC0000FB</mpp1:KSN>

<mpp1:MagnePrint>0144A62C8A18203BE697334D96B27BC5EE2B93F79FF157C338C2C695825BF69C19197760D4B65ADD5
14A4B69C38075977A3576AF3E5A796E</mpp1:MagnePrint>
            <mpp1:MagnePrintStatus>61403000</mpp1:MagnePrintStatus>

<mpp1:Track1>3C187B54C85E49294BAA284D8B5F4B8C4B3EE2AF7C409E0DF8AAF85C5EE9D5D95438C4B580B72EC30BA19
97945EB2B9B9843400CE9ED2D53A5FE55E5C0FDF60E42C62053230551CEF</mpp1:Track1>

<mpp1:Track2>080E3EA5606A8FF01ADE6FF9DC5C820E1A6932A9EA36297921E2CC7E3F9BD9CB6FF553D33E6FE45D</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>100</mpp1:Amount>
            <mpp1:ProcessorName>Jet Pay</mpp1:ProcessorName>
            <mpp1:TransactionInputDetails>
                <sys:KeyValuePairOfstringstring>
                    <sys:key></sys:key>
                    <sys:value></sys:value>
                </sys:KeyValuePairOfstringstring>
            </mpp1:TransactionInputDetails>
            <mpp1:TransactionType>SALE</mpp1:TransactionType>
        </mpp1:TransactionInput>
        </mpp1:ProcessCardSwipeRequest>
    </mpp:ProcessCardSwipeRequests>
</mpp:ProcessCardSwipe>
</soapenv:Body>
</soapenv:Envelope>

```

## SAMPLE PROCESSCARDSWIPE RESPONSE

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
    <s:Body>
        <ProcessCardSwipeResponse xmlns="http://www.magensa.net/MPPGv3/">
            <ProcessCardSwipeResult xmlns:a="http://schemas.datacontract.org/2004/07/MPPGv3WS.Core"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
                <a:ProcessCardSwipeResponse>
                    <a:CardSwipeOutput>
                        <a:AdditionalOutputData i:nil="true"
xmlns:b="http://schemas.datacontract.org/2004/07/System.Collections.Generic"/>
                        <a:CardID>L2H6qxnEFRxus6b6DtxOMySXy0bYwXPd8AHeqUoHgA=</a:CardID>
                        <a:IsReplay>true</a:IsReplay>
                        <a:MagnePrintScore>0.865793</a:MagnePrintScore>
                    </a:CardSwipeOutput>
                </a:ProcessCardSwipeResponse>
            </ProcessCardSwipeResult>
        </ProcessCardSwipeResponse>
    </s:Body>
</s:Envelope>

```

```

</a:CardSwipeOutput>
<a:CustomerTransactionID>123</a:CustomerTransactionID>
<a:MPPGv3WSFault i:nil="true"/>
<a:MagTranID>9377f617-28c3-4f27-88be-0f2f311dbdff</a:MagTranID>
<a:TransactionOutput>
  <a:AVSResult>Y</a:AVSResult>
  <a:AuthCode>TEST94</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:Token i:nil="true"/>
  <a:TransactionID>000000000000002475</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, 11 May 2017 16:17:05 GMT
Server: Apache

&
<JetPayResponse Version="2.0">
  <TransactionID>000000000000002475</TransactionID>
  <ActionCode>000</ActionCode>
  <Approval>TEST94</Approval>
  <CVV2>P</CVV2>
  <ResponseText>APPROVED</ResponseText>
  <UniqueID>QnThRhQoQlPnQjQmQlPnPoyl</UniqueID>
  <RRN>713116000253</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>2017-05-11 16:17:05Z</a:TransactionUTCTimestamp>
</a:ProcessCardSwipeResponse>
<a:ProcessCardSwipeResponse>
  <a:CardSwipeOutput>
    <a:AdditionalOutputData i:nil="true"
xmlns:b="http://schemas.datacontract.org/2004/07/System.Collections.Generic"/>
      <a:CardID>L2H6qxnEFRxus6b6DtxOMySXy0bYwxpPD8AHeqUoHgA=</a:CardID>
      <a:IsReplay>true</a:IsReplay>
      <a:MagnePrintScore>0.865793</a:MagnePrintScore>
    </a:CardSwipeOutput>
    <a:CustomerTransactionID>456</a:CustomerTransactionID>
    <a:MPPGv3WSFault i:nil="true"/>
    <a:MagTranID>7266d35f-d910-4d72-a810-b6d3798a2fc2</a:MagTranID>
    <a:TransactionOutput>
      <a:AVSResult>Y</a:AVSResult>
      <a:AuthCode>TEST06</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:Token i:nil="true"/>
        <a:TransactionID>000000000000002476</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, 11 May 2017 16:17:05 GMT
Server: Apache

&
<JetPayResponse Version="2.0">
    <TransactionID>000000000000002476</TransactionID>
    <ActionCode>000</ActionCode>
    <Approval>TEST06</Approval>
    <CVV2>P</CVV2>
    <ResponseText>APPROVED</ResponseText>
    <UniqueID>QnThRhQoQlPnQjQmQlPnPnPh</UniqueID>
    <RRN>713116000255</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>2017-05-11 16:17:05Z</a:TransactionUTCTimestamp>
    </a:ProcessCardSwipeResponse>
</ProcessCardSwipeResult>
</ProcessCardSwipeResponse>
</s:Body>
</s:Envelope>
```

## 1.2 ProcessEMVSRED

This operation processes a batch of ProcessEMVSREDRequest elements for EMV payment mode.

### INPUT PROPERTIES

Property (* required)	Type	Description
AdditionalRequestData	Array of key / value	<p>Contains custom request data required by the target service provider. Elements are expressed as key/value pairs grouped under &lt;KeyValuePairOfstringstring&gt;. See sample request.</p> <p>For a fallback transaction, payload tags within the first call may be preserved and passed into the second call. This example shows how to preserve the tags CCTrack2, CCNum, YY, and MM by including a <b>NonremovableTags</b> key/value pair.</p> <pre>key = NonremovableTags value = &lt;![CDATA[ &lt;NonremovableTags&gt;   &lt;Tag&gt;CCTrack2&lt;/Tag&gt;   &lt;Tag&gt;CCNum&lt;/Tag&gt;   &lt;Tag&gt;YY&lt;/Tag&gt;   &lt;Tag&gt;MM&lt;/Tag&gt; &lt;/NonremovableTags&gt;]]&gt;</pre> <p>To mask a field of the payload response, specify the start and end of a field. This example shows how to mask the contents within an AcctNum field by including a <b>PayloadResponseFieldsToMask</b> key/value pair.</p> <pre>key = PayloadResponseFieldsToMask value = &lt;![CDATA[ &lt;FieldsToMask&gt; &lt;Field&gt; &lt;FieldStart&gt;&amp;lt;AcctNum&amp;gt;&lt;/FieldStart&gt; &lt;FieldEnd&gt;&amp;lt;/AcctNum&amp;gt;&lt;/FieldEnd&gt; &lt;FieldPattern&gt;\$MaskString( {MachedField} , 0 , \$Add( \$Length( {MachedField} ) , -4 ) , * ) &lt;/FieldPattern&gt; &lt;/Field&gt; &lt;/FieldsToMask&gt;]]&gt;</pre>
Amount *	Decimal	Amount for transaction in units (dollars or cents) as per target service provider's API.
CustomerCode *	String	Customer code for credential assigned by Magensa.
CustomerTransactionID	String	Client-assigned transaction ID for easy cross-reference.

Property (* required)	Type	Description
EMVSREDData *	String	Encrypted EMV transaction data (ARQC) from device.
EncryptionType *	String	Encryption type used for EMVSREDData: <b>80</b> (DUKPT Key Data Variant), <b>81</b> (DUKPT Key PIN Variant)
KSN *	String	Key serial number
NumberOfPaddedBytes *	String	Number of bytes padded to the end of the decrypted EMVSREDData to make a multiple of 8 bytes.
Password *	String	Password for credential assigned by Magensa.
PaymentMode *	String	Mode of transaction payment: EMV, MagStripe (fallback option for EMV)
ProcessorName *	String	Magensa assigned name for third-party service provider.
TransactionInputDetails	Array of key / value	Contains transaction information required by the target service provider. Elements are expressed as key/value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionType *	String	Transaction type: SALE, AUTHORIZE, CAPTURE, VOID, REFUND, FORCE, REJECT
Username *	String	Username for credential assigned by Magensa.

Note: \* = Required

## OUTPUT PROPERTIES

Property	Type	Description
AdditionalOutputData	Array of key / value	Contains additional output data. Elements are expressed as key / value pairs grouped under <KeyValuePairOfstringstring>. See examples
AuthCode	String	Authorization code from target service provider.
AuthorizedAmount	Decimal	Authorized amount from target service provider.
AVSResult	String	Address Verification System result from target service provider.
CardID	String	Card ID from Magensa.
CustomerTransactionID	String	Client-assigned transaction ID from input.
CVVResult	String	Card Verification Value result from target service provider.

Property	Type	Description
IsReplay	Boolean	Boolean value indicating prior use of KSN from Magensa.
IssuerAuthenticationData	String	Issuer authenticate data from target service provider.
IssuerScriptTemplate1	String	Issuer script template 1 from target service provider.
IssuerScriptTemplate2	String	Issuer script template 2 from target service provider.
IsTransactionApproved	Boolean	Boolean value indicating approval status of the transaction.
MagTranID	String	Transaction ID (GUID) from Magensa.
MPPGv3WSFault	String	Contains FaultCode, FaultReason and additional details when error encountered while processing particular request. Otherwise is null
Token	String	Token if target service provider is Magensa's Token web service.
TransactionID	String	Transaction ID from target service provider.
TransactionMessage	String	Transaction Message from target service provider.
TransactionOutputDetails	Array of key / value	Contains additional output data returned by the target service provider. Elements are expressed as key / value pairs grouped under <KeyValuePairOfstringstring>. See examples
TransactionStatus	String	Transaction status from target service provider.
TransactionUTCTimestamp	String	Transaction timestamp from Magensa.

## SAMPLE PROCESSEMVSRD REQUEST

```

POST https://mppg.magensa.net/v3/MPPGv3Service.svc HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: text/xml; charset=UTF-8
SOAPAction: "http://www.magensa.net/MPPGv3/IMPPGv3Service/ProcesseEMVSRED"
Content-Length: 5314
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/MPPGv3/"
xmlns:mpp1="http://schemas.datacontract.org/2004/07/MPPGv3WS.Core"
xmlns:sys="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
  <soapenv:Header/>
  <soapenv:Body>
    <mpp:ProcesseEMVSRED>
      <mpp:ProcesseEMVSREDRequests>
        <mpp1:ProcesseEMVSREDRequest>
          <mpp1:AdditionalRequestData>
            <sys:KeyValuePairOfstringstring>
              <sys:key>NonremovableTags</sys:key>
            </sys:KeyValuePairOfstringstring>
          </mpp1:AdditionalRequestData>
        </mpp1:ProcesseEMVSREDRequest>
      </mpp:ProcesseEMVSREDRequests>
    </mpp:ProcesseEMVSRED>
  </soapenv:Body>
</soapenv:Envelope>

```

```

<sys:value><![CDATA[<NonremovableTags><Tag>CCTrack2</Tag><Tag>CCNum</Tag><Tag>YY</Tag><Tag>MM</Tag>
</NonremovableTags>]]></sys:value>
</sys:KeyValuePairOfstringstring>
<sys:KeyValuePairOfstringstring>
  <sys:key>PayloadResponseFieldsToMask</sys:key>

<sys:value><![CDATA[<FieldsToMask><Field><FieldStart>&lt;AcctNum&gt;</FieldStart><FieldEnd>&lt;/Ac
ctNum&gt;</FieldEnd></Field></FieldsToMask>]]></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>123</mpp1:CustomerTransactionID>
<mpp1:EMVSREDInput>

<mpp1:EMVSREDData>11D9254A8531D345FB0D64E0B765EF6A148914041AC95F73184D5812BAB6580221FB86033B67E9CB
2AD1126EDE619C9CE8697AE654AE1AD9BC9E0D6941F6E4DE871709D06EEAFD7F1E8679F162B210AB47279D27C8E6508003
AAC4E7D15E0694DEAE7B30BC9263F3522BEE3187C525B22B8207CAA334DA3C856F2E5FB9B12BF4CC81134AF43E64269B52
A3F0FA68DE1590FA13F70700D98067FF333050F3B5A5D0AAA875AF5A94844A106B686E49944A7DB5D550D08F2DFAA267D6
3968E1A86D15E70FDD4688934F24909121BABD40D882AD841CBAC4EDD8984E07EFF2BFF03835934794D739906CE46AB445
ABAE3361DC4E14AC229390D41DAE32FB97C83EF72AC5E93E66101AB339A4F66558F8185F4A7C6A8B1CD824D6405C62AAE2
D2E8DBD04CC2DA6139B42F2FFF19EB4C0E32A3CC285736BB94D17DE10BB2FCE6A156B5BE2FB622BE74EB9B41A88D34DA81
59D634460E4F460DAF87F64DACD0ABF409CF9DA4733F290F86FAB6251E283393DD9D39ABB511D064F332EFDB546B8F0279
ABD26AD15608E371C5E418D23F7BE8ED58</mpp1:EMVSREDData>
  <mpp1:EncryptionType>80</mpp1:EncryptionType>
  <mpp1:KSN>95000300000E0C200009</mpp1:KSN>
  <mpp1:NumberOfPaddedBytes>3</mpp1:NumberOfPaddedBytes>
  <mpp1:PaymentMode>EMV</mpp1:PaymentMode>
</mpp1:EMVSREDInput>
<mpp1:TransactionInput>
  <mpp1:Amount>100</mpp1:Amount>
  <mpp1:ProcessorName>Jet Pay</mpp1:ProcessorName>
  <mpp1:TransactionInputDetails>
    <sys:KeyValuePairOfstringstring>
      <sys:key></sys:key>
      <sys:value></sys:value>
    </sys:KeyValuePairOfstringstring>
  </mpp1:TransactionInputDetails>
  <mpp1:TransactionType>SALE</mpp1:TransactionType>
</mpp1:TransactionInput>
</mpp1:ProcessEMVSREDRequest>

<mpp1:ProcessEMVSREDRequest>
  <mpp1:AdditionalRequestData>
    <sys:KeyValuePairOfstringstring>
      <sys:key>PayloadResponseFieldsToMask</sys:key>

<sys:value><![CDATA[<FieldsToMask><Field><FieldStart>&lt;AcctNum&gt;</FieldStart><FieldEnd>&lt;/Ac
ctNum&gt;</FieldEnd></Field></FieldsToMask>]]></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>456</mpp1:CustomerTransactionID>
<mpp1:EMVSREDInput>

<mpp1:EMVSREDData>11D9254A8531D345FB0D64E0B765EF6A148914041AC95F73184D5812BAB6580221FB86033B67E9CB
2AD1126EDE619C9CE8697AE654AE1AD9BC9E0D6941F6E4DE871709D06EEAFD7F1E8679F162B210AB47279D27C8E6508003
AAC4E7D15E0694DEAE7B30BC9263F3522BEE3187C525B22B8207CAA334DA3C856F2E5FB9B12BF4CC81134AF43E64269B52
A3F0FA68DE1590FA13F70700D98067FF333050F3B5A5D0AAA875AF5A94844A106B686E49944A7DB5D550D08F2DFAA267D6
3968E1A86D15E70FDD4688934F24909121BABD40D882AD841CBAC4EDD8984E07EFF2BFF03835934794D739906CE46AB445
ABAE3361DC4E14AC229390D41DAE32FB97C83EF72AC5E93E66101AB339A4F66558F8185F4A7C6A8B1CD824D6405C62AAE2
D2E8DBD04CC2DA6139B42F2FFF19EB4C0E32A3CC285736BB94D17DE10BB2FCE6A156B5BE2FB622BE74EB9B41A88D34DA81

```







```

        <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, 11 May 2017 18:47:16 GMT
Server: Apache

&
<JetPayResponse Version="2.0">
  <TransactionID>000000000000002488</TransactionID>
  <ActionCode>000</ActionCode>
  <Approval>TEST20</Approval>
  <ResponseText>APPROVED</ResponseText>
  <UniqueID>QnThRhQoQlPnQjQcTlQmTkXl</UniqueID>
  <RRN>753118000109</RRN>
  <RawResponseCode>00</RawResponseCode>
  <ICC/>
</JetPayResponse>]]></b:value>
        </b:KeyValuePairOfstringstring>
        </a:TransactionOutputDetails>
        <a:TransactionStatus>000</a:TransactionStatus>
    </a:TransactionOutput>
    <a:TransactionUTCTimestamp>2017-05-11 18:47:14Z</a:TransactionUTCTimestamp>
  </a:ProcessEMVSREDResponse>
</ProcessEMVSREDResult>
</ProcessEMVSREDResponse>
</s:Body>
</s:Envelope>
```

## 1.3 ProcessReferenceID

This operation processes a batch of ProcessReferenceIDRequest elements for previously processed transactions.

### INPUT PROPERTIES

Property (* required)	Type	Description
AdditionalRequestData	Array of key / value	Contains custom request data required by the target service provider. Elements are expressed as key/value pairs grouped under <KeyValuePairOfstringstring>. See sample request.
Amount *	Decimal	Amount for transaction in units (dollars or cents) as per target service provider's API.
CustomerCode *	String	Customer code for credential assigned by Magensa.
CustomerTransactionID	String	Client-assigned transaction ID for easy cross-reference.
Password *	String	Password for credential assigned by Magensa.
ProcessorName *	String	Magensa assigned name for third-party service provider.
ReferenceAuthCode	String	Authorization code of a prior transaction.
ReferenceTransactionID *	String	Transaction ID of a prior transaction.
TransactionInputDetails	Array of key / value	Contains transaction information required by the target service provider. Elements are expressed as key/value pairs grouped under <KeyValuePairOfstringstring>. See examples
TransactionType *	String	Transaction type: CAPTURE, VOID, REFUND, FORCE, REJECT
Username *	String	Username for credential assigned by Magensa.

Note: \* = Required

### OUTPUT PROPERTIES

Property	Type	Description
AuthCode	String	Authorization code from target service provider.
AuthorizedAmount	Decimal	Authorized amount from target service provider.
AVSResult	String	Address Verification System result from target service provider.

Property	Type	Description
CustomerTransactionID	String	Client-assigned transaction ID from input.
CVVResult	String	Card Verification Value result from target service provider.
IssuerAuthenticationData	String	Issuer authenticate data from target service provider.
IssuerScriptTemplate1	String	Issuer script template 1 from target service provider.
IssuerScriptTemplate2	String	Issuer script template 2 from target service provider.
IsTransactionApproved	Boolean	Boolean value indicating approval status of the transaction.
MagTranID	String	Transaction ID (GUID) from Magensa.
MPPGv3WSFault	String	Contains FaultCode, FaultReason and additional details when error encountered while processing particular request. Otherwise is null
Token	String	Token if target service provider is Magensa's Token web service.
TransactionID	string	Transaction ID from target service provider.
TransactionMessage	string	Transaction Message from target service provider.
TransactionOutputDetails	Array of key / value	Contains additional output data returned by the target service provider. Elements are expressed as key / value pairs grouped under <KeyValuePairOfstringstring>. See examples
TransactionStatus	string	Transaction status from target service provider.
TransactionUTCTimestamp	string	Transaction timestamp from Magensa.

## SAMPLE PROCESSREFERENCEID REQUEST

```
POST https://mppg.magensa.net/v3/MPPGv3Service.svc HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: text/xml;charset=UTF-8
SOAPAction: "http://www.magensa.net/MPPGv3/IMPPGv3Service/ProcessReferenceID"
Content-Length: 3542
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/MPPGv3/"
xmlns:mppl="http://schemas.datacontract.org/2004/07/MPPGv3WS.Core"
xmlns:sys="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
  <soapenv:Header/>
  <soapenv:Body>
    <mpp:ProcessReferenceID>
      <mpp:ProcessReferenceIDRequests>
        <mppl:ProcessReferenceIDRequest>
          <mppl:AdditionalRequestData>
```

MPPGv3 | Magensa Payment Protection Gateway version 3.0 | Programmer's Reference Manual

```

        <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>123</mpp1:CustomerTransactionID>
      <mpp1:TransactionInput>
        <mpp1:Amount>100</mpp1:Amount>
        <mpp1:ProcessorName>Jet Pay</mpp1:ProcessorName>
        <mpp1:TransactionInputDetails>
          <sys:KeyValuePairOfstringstring>
            <sys:key>CCTrack1</sys:key>
            <sys:value>B4555555555555584^JETPAY/MAGENSA^2012101000000000049600000000000</sys:value>
          </sys:KeyValuePairOfstringstring>
        </mpp1:TransactionInputDetails>
        <mpp1:TransactionType>VOID</mpp1:TransactionType>
        <mpp1:ReferenceAuthCode>TEST34</mpp1:ReferenceAuthCode>
        <mpp1:ReferenceTransactionID>000000000000002500</mpp1:ReferenceTransactionID>
      </mpp1:TransactionInput>
    </mpp1:ProcessReferenceIDRequest>

    <mpp1:ProcessReferenceIDRequest>
      <mpp1:AdditionalRequestData>
        <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>456</mpp1:CustomerTransactionID>
      <mpp1:TransactionInput>
        <mpp1:Amount>200</mpp1:Amount>
        <mpp1:ProcessorName>Jet Pay</mpp1:ProcessorName>
        <mpp1:TransactionInputDetails>
          <sys:KeyValuePairOfstringstring>
            <sys:key>CCTrack1</sys:key>
            <sys:value>B4555555555555584^JETPAY/MAGENSA^2012101000000000049600000000000</sys:value>
          </sys:KeyValuePairOfstringstring>
        </mpp1:TransactionInputDetails>
        <mpp1:TransactionType>VOID</mpp1:TransactionType>
        <mpp1:ReferenceAuthCode>TEST51</mpp1:ReferenceAuthCode>
        <mpp1:ReferenceTransactionID>000000000000002501</mpp1:ReferenceTransactionID>
      </mpp1:TransactionInput>
    </mpp1:ProcessReferenceIDRequest>
  </mpp:ProcessReferenceIDRequests>
</mpp:ProcessReferenceID>
</soapenv:Body>
</soapenv:Envelope>

```

## SAMPLE PROCESSREFERENCEID RESPONSE

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <ProcessReferenceIDResponse xmlns="http://www.magensa.net/MPPGv3/">
      <ProcessReferenceIDResult xmlns:a="http://schemas.datacontract.org/2004/07/MPPGv3WS.Core"
        xmlns:i="http://www.w3.org/2001/XMLSchema-instance">

```

```

    <a:ProcessReferenceIDResponse>
      <a:CustomerTransactionID>123</a:CustomerTransactionID>
      <a:MPPGv3WSFault i:nil="true"/>
      <a:MagTranID>67b02ed0-d207-4d6f-b90d-cea4142a16f4</a:MagTranID>
      <a:TransactionOutput>
        <a:AVSResult i:nil="true"/>
        <a:AuthCode>TEST34</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:Token i:nil="true"/>
        <a:TransactionID>000000000000002500</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, 11 May 2017 21:03:46 GMT
Server: Apache

<<JetPayResponse Version="2.0"><TransactionID>000000000000002500</TransactionID>
<ActionCode>000</ActionCode>
<Approval>TEST34</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>2017-05-11 21:03:45Z</a:TransactionUTCTimestamp>
    </a:ProcessReferenceIDResponse>
    <a:ProcessReferenceIDResponse>
      <a:CustomerTransactionID>456</a:CustomerTransactionID>
      <a:MPPGv3WSFault i:nil="true"/>
      <a:MagTranID>54525019-518b-4dfb-9f81-b8cbcb070ea0</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 i:nil="true"/>
        <a:IssuerScriptTemplate1 i:nil="true"/>
        <a:IssuerScriptTemplate2 i:nil="true"/>
        <a:Token i:nil="true"/>
        <a:TransactionID>000000000000002501</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, 11 May 2017 21:03:46 GMT
Server: Apache

```

```
&<JetPayResponse Version="2.0"><TransactionID>00000000000002501</TransactionID>
<ActionCode>000</ActionCode>
<Approval>TEST51</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>2017-05-11 21:03:45Z</a:TransactionUTCTimestamp>
</a:ProcessReferenceIDResponse>
</ProcessReferenceIDResult>
</ProcessReferenceIDResponse>
</s:Body>
</s:Envelope>
```

## 1.4 ProcessManualEntry

This operation processes a batch of ProcessManualEntryRequest elements for manual entry payment mode.

### INPUT PROPERTIES

Property (* required)	Type	Description
AdditionalRequestData	Array of key / value	Contains custom request data required by the target service provider. Elements are expressed as key/value pairs grouped under <KeyValuePairOfstringstring>. See sample request.
AddressLine1	String	Line 1 of address
AddressLine2	String	Line 2 of address
Amount *	Decimal	Amount for transaction in units (dollars or cents) as per target service provider's API.
City	String	City
Country	String	Country
CustomerCode *	String	Customer code for credential assigned by Magensa.
CustomerTransactionID	String	Client-assigned transaction ID for easy cross-reference.
CVV	String	Card verification value.
ExpirationDate *	String	Expiration date in the format required by target service provider.
NameOnCard	String	Name on the card.
PAN *	String	Primary Account Number
Password *	String	Password for credential assigned by Magensa.
ProcessorName *	String	Magensa assigned name for third-party service provider.
State	String	State
TransactionInputDetails	Array of key / value	Contains transaction information required by the target service provider. Elements are expressed as key/value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionType *	String	Transaction type: SALE, AUTHORIZE
Username *	String	Username for credential assigned by Magensa.
ZIP	String	Zip code



Note: \* = Required

## OUTPUT PROPERTIES

Property	Type	Description
AuthCode	String	Authorization code from target service provider.
AuthorizedAmount	Decimal	Authorized amount from target service provider.
AVSResult	String	Address Verification System result from target service provider.
CustomerTransactionID	String	Client-assigned transaction ID from input.
CVVResult	String	Card Verification Value result from target service provider.
IssuerAuthenticationData	String	Issuer authenticate data from target service provider.
IssuerScriptTemplate1	String	Issuer script template 1 from target service provider.
IssuerScriptTemplate2	String	Issuer script template 2 from target service provider.
IsTransactionApproved	Boolean	Boolean value indicating approval status of the transaction.
MagTranID	String	Transaction ID (GUID) from Magensa.
MPPGv3WSFault	String	Contains FaultCode, FaultReason and additional details when error encountered while processing particular request. Otherwise is null
Token	String	Token if target service provider is Magensa's Token web service.
TransactionID	String	Transaction ID from target service provider.
TransactionMessage	String	Transaction Message from target service provider.
TransactionOutputDetails	Array of key / value	Contains additional output data returned by the target service provider. Elements are expressed as key / value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionStatus	String	Transaction status from target service provider.
TransactionUTCTimestamp	String	Transaction timestamp from Magensa.

## SAMPLE PROCESSMANUALENTRY REQUEST

```
POST https://mppg.magensa.net/v3/MPPGv3Service.svc HTTP/1.1
Accept-Encoding: gzip,deflate
```

```
Content-Type: text/xml; charset=UTF-8
SOAPAction: "http://www.magensa.net/MPPGv3/IMPPGv3Service/ProcessManualEntry"
Content-Length: 4309
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/MPPGv3/"
xmlns:mpp1="http://schemas.datacontract.org/2004/07/MPPGv3WS.Core"
xmlns:sys="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
  <soapenv:Header/>
  <soapenv:Body>
    <mpp:ProcessManualEntry>
      <mpp:ProcessManualEntryRequests>
        <mpp1:ProcessManualEntryRequest>
          <mpp1:AdditionalRequestData>
            <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>123</mpp1:CustomerTransactionID>
          <mpp1:ManualEntryInput>
            <mpp1:AddressLine1></mpp1:AddressLine1>
            <mpp1:AddressLine2></mpp1:AddressLine2>
            <mpp1:CVV></mpp1:CVV>
            <mpp1:City></mpp1:City>
            <mpp1:Country></mpp1:Country>
            <mpp1:ExpirationDate>2012</mpp1:ExpirationDate>
            <mpp1:NameOnCard>JETPAY/MAGENSA </mpp1:NameOnCard>
            <mpp1:PAN>4555555555555584</mpp1:PAN>
            <mpp1:State>CA</mpp1:State>
            <mpp1:ZIP>99999</mpp1:ZIP>
          </mpp1:ManualEntryInput>
          <mpp1:TransactionInput>
            <mpp1:Amount>100</mpp1:Amount>
            <mpp1:ProcessorName>Jet Pay</mpp1:ProcessorName>
            <mpp1:TransactionInputDetails>
              <sys:KeyValuePairOfstringstring>
                <sys:key></sys:key>
                <sys:value></sys:value>
              </sys:KeyValuePairOfstringstring>
            </mpp1:TransactionInputDetails>
            <mpp1:TransactionType>SALE</mpp1:TransactionType>
          </mpp1:TransactionInput>
        </mpp1:ProcessManualEntryRequest>

        <mpp1:ProcessManualEntryRequest>
          <mpp1:AdditionalRequestData>
            <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>
        </m
```

```

    <mpp1:CustomerTransactionID>456</mpp1:CustomerTransactionID>
    <mpp1:ManualEntryInput>
      <mpp1:AddressLine1></mpp1:AddressLine1>
      <mpp1:AddressLine2></mpp1:AddressLine2>
      <mpp1:CVV></mpp1:CVV>
      <mpp1:City></mpp1:City>
      <mpp1:Country></mpp1:Country>
      <mpp1:ExpirationDate>2012</mpp1:ExpirationDate>
      <mpp1:NameOnCard>JETPAY/MAGENSA    </mpp1:NameOnCard>
      <mpp1:PAN>4555555555555584</mpp1:PAN>
      <mpp1:State>CA</mpp1:State>
      <mpp1:ZIP>99999</mpp1:ZIP>
    </mpp1:ManualEntryInput>
    <mpp1:TransactionInput>
      <mpp1:Amount>200</mpp1:Amount>
      <mpp1:ProcessorName>Jet Pay</mpp1:ProcessorName>
      <mpp1:TransactionInputDetails>
        <sys:KeyValuePairOfstringstring>
          <sys:key></sys:key>
          <sys:value></sys:value>
        </sys:KeyValuePairOfstringstring>
      </mpp1:TransactionInputDetails>
      <mpp1:TransactionType>SALE</mpp1:TransactionType>
    </mpp1:TransactionInput>
  </mpp1:ProcessManualEntryRequest>
</mpp:ProcessManualEntryRequests>
</mpp:ProcessManualEntry>
</soapenv:Body>
</soapenv:Envelope>

```

## SAMPLE PROCESSMANUALENTRY RESPONSE

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <ProcessManualEntryResponse xmlns="http://www.magensa.net/MPPGv3/">
      <ProcessManualEntryResult xmlns:a="http://schemas.datacontract.org/2004/07/MPPGv3WS.Core"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <a:ProcessManualEntryResponse>
          <a:CustomerTransactionID>123</a:CustomerTransactionID>
          <a:MPPGv3WSFault i:nil="true"/>
          <a:MagTranID>73deb041-99e6-4622-ab14-9b7913b50987</a:MagTranID>
          <a:TransactionOutput>
            <a:AVSResult>Y</a:AVSResult>
            <a:AuthCode>TEST04</a:AuthCode>
            <a:AuthorizedAmount i:nil="true"/>
            <a:CVVResult i:nil="true"/>
            <a:IsTransactionApproved>true</a:IsTransactionApproved>
            <a:IssuerAuthenticationData i:nil="true"/>
            <a:IssuerScriptTemplatel i:nil="true"/>
            <a:IssuerScriptTemplate2 i:nil="true"/>
            <a:Token i:nil="true"/>
            <a:TransactionID>000000000000002505</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, 11 May 2017 21:41:13 GMT

```

Server: Apache

```
&
<JetPayResponse Version="2.0">
  <TransactionID>000000000000002505</TransactionID>
  <ActionCode>000</ActionCode>
  <Approval>TEST04</Approval>
  <ResponseText>APPROVED</ResponseText>
  <UniqueID>QnThRhQoQlPnQjRjTjQhUjUn</UniqueID>
  <RRN>713121002610</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>2017-05-11 21:41:11Z</a:TransactionUTCTimestamp>
</a:ProcessManualEntryResponse>
<a:ProcessManualEntryResponse>
  <a:CustomerTransactionID>456</a:CustomerTransactionID>
  <a:MPPGv3WSFault i:nil="true"/>
  <a:MagTranID>c39ef9bf-4952-4d2d-b2be-407c1186fff1</a:MagTranID>
  <a:TransactionOutput>
    <a:AVSResult>Y</a:AVSResult>
    <a:AuthCode>TEST80</a:AuthCode>
    <a:AuthorizedAmount i:nil="true"/>
    <a:CVVResult i:nil="true"/>
    <a:IsTransactionApproved>true</a:IsTransactionApproved>
    <a:IssuerAuthenticationData i:nil="true"/>
    <a:IssuerScriptTemplatel i:nil="true"/>
    <a:IssuerScriptTemplate2 i:nil="true"/>
    <a:Token i:nil="true"/>
    <a:TransactionID>000000000000002506</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, 11 May 2017 21:41:13 GMT
Server: Apache

```

```
&
<JetPayResponse Version="2.0">
  <TransactionID>000000000000002506</TransactionID>
  <ActionCode>000</ActionCode>
  <Approval>TEST80</Approval>
  <ResponseText>APPROVED</ResponseText>
  <UniqueID>QnThRhQoQlPnQjRjTjQhUjUm</UniqueID>
  <RRN>713121002611</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>2017-05-11 21:41:11Z</a:TransactionUTCTimestamp>
```

```
</a:ProcessManualEntryResponse>
</ProcessManualEntryResult>
</ProcessManualEntryResponse>
</s:Body>
</s:Envelope>
```

## 1.5 ProcessToken

This operation processes a batch of ProcessTokenRequest elements for token payment mode. To generate a Token, call ProcessCardSwipe or ProcessEMVSRED with the ProcessorName as Token.

### INPUT PROPERTIES

Property (* required)	Type	Description
AdditionalRequestData	Array of key / value	Contains custom request data required by the target service provider. Elements are expressed as key/value pairs grouped under <KeyValuePairOfstringstring>. See sample request.  For ProcessToken, include a required <b>PosDecryptAction</b> key/value pair as follows: key = PosDecryptAction value = \$Hex2ASCII ( {DecryptData} )
Amount *	Decimal	Amount for transaction in units (dollars or cents) as per target service provider's API.
CustomerCode *	String	Customer code for credential assigned by Magensa.
CustomerTransactionID	String	Client-assigned transaction ID for easy cross-reference.
Password *	String	Password for credential assigned by Magensa.
ProcessorName *	String	Magensa assigned name for third-party service provider.
Token *	String	Token issued by Magensa's Token service.
TransactionInputDetails	Array of key / value	Contains transaction information required by the target service provider. Elements are expressed as key/value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionType *	String	Transaction type: CAPTURE, VOID, REFUND, FORCE, REJECT
Username *	String	Username for credential assigned by Magensa.

Note: \* = Required

**OUTPUT PROPERTIES**

Property	Type	Description
AuthCode	String	Authorization code from target service provider.
AuthorizedAmount	Decimal	Authorized amount from target service provider.
AVSResult	String	Address Verification System result from target service provider.
CustomerTransactionID	String	Client-assigned transaction ID from input.
CVVResult	String	Card Verification Value result from target service provider.
IssuerAuthenticationData	String	Issuer authenticate data from target service provider.
IssuerScriptTemplate1	String	Issuer script template 1 from target service provider.
IssuerScriptTemplate2	String	Issuer script template 2 from target service provider.
IsTransactionApproved	Boolean	Boolean value indicating approval status of the transaction.
MagTranID	String	Transaction ID (GUID) from Magensa.
MPPGv3WSFault	String	Contains FaultCode, FaultReason and additional details when error encountered while processing particular request. Otherwise is null
Token	String	Token if target service provider is Magensa's Token web service.
TransactionID	String	Transaction ID from target service provider.
TransactionMessage	String	Transaction Message from target service provider.
TransactionOutputDetails	Array of key / value	Contains additional output data returned by the target service provider. Elements are expressed as key / value pairs grouped under <KeyValuePairOfstringstring>. See examples.
TransactionStatus	String	Transaction status from target service provider.
TransactionUTCTimestamp	String	Transaction timestamp from Magensa.

**SAMPLE PROCESSTOKEN REQUEST**

```

POST https://mppg.magensa.net/v3/MPPGv3Service.svc HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: text/xml; charset=UTF-8
SOAPAction: "http://www.magensa.net/MPPGv3/IMPPGv3Service/ProcessToken"
Content-Length: 5729
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/MPPGv3/"
xmlns:mpp1="http://schemas.datacontract.org/2004/07/MPPGv3WS.Core"
xmlns:sys="http://schemas.datacontract.org/2004/07/System.Collections.Generic">
  <soapenv:Header/>
  <soapenv:Body>
    <mpp:ProcessToken>
      <mpp:ProcessTokenRequests>
        <mpp1:ProcessTokenRequest>
          <mpp1:AdditionalRequestData>
            <sys:KeyValuePairOfstringstring>
              <sys:key>PosDecryptAction</sys:key>
              <sys:value>$Hex2ASCII({DecryptData})</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>123</mpp1:CustomerTransactionID>

<mpp1:Token>FA820119DFE0012462613935343831382D356632652D343166632D393536622D3435653238626636653566
31DFE00205312E302E30DFE0041B323032352D31322D32355430303A30303A30302E3030303030303030DFE0050454657374
DFE0061C323031372D30322D30385431393A31353A34332E383630353935365ADFE007103939303030303030303030303030
303032DFE0080731303030323634DFE0092434303539666337632D626666352D346638612D613237652D63346261363139
3766656133DFE011842DEE3519DC99561C15CED8C2F8641B7F76B337FDF00746DDFE0120A90100100000000000136DFE0
2108454D56546F6B656EDFE003207F7470BA471EED87C58A556F458CEF1A033E41A03FE3218E227FA3D93136CF7A</mpp1
:Token>

          <mpp1:TransactionInput>
            <mpp1:Amount>100</mpp1:Amount>
            <mpp1:ProcessorName>Rapid Connect</mpp1:ProcessorName>
            <mpp1:TransactionInputDetails>
              <sys:KeyValuePairOfstringstring>
                <sys:key></sys:key>
                <sys:value></sys:value>
              </sys:KeyValuePairOfstringstring>
            </mpp1:TransactionInputDetails>
            <mpp1:TransactionType>REFUND</mpp1:TransactionType>
          </mpp1:TransactionInput>
        </mpp1:ProcessTokenRequest>

        <mpp1:ProcessTokenRequest>
          <mpp1:AdditionalRequestData>
            <sys:KeyValuePairOfstringstring>
              <sys:key>PosDecryptAction</sys:key>
              <sys:value>$Hex2ASCII({DecryptData})</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>456</mpp1:CustomerTransactionID>

<mpp1:Token>FA820119DFE0012462613935343831382D356632652D343166632D393536622D3435653238626636653566
31DFE00205312E302E30DFE0041B323032352D31322D32355430303A30303A30302E3030303030303030DFE0050454657374
DFE0061C323031372D30322D30385431393A31353A34332E383630353935365ADFE007103939303030303030303030303030
303032DFE0080731303030323634DFE0092434303539666337632D626666352D346638612D613237652D63346261363139
3766656133DFE011842DEE3519DC99561C15CED8C2F8641B7F76B337FDF00746DDFE0120A90100100000000000136DFE0
2108454D56546F6B656EDFE003207F7470BA471EED87C58A556F458CEF1A033E41A03FE3218E227FA3D93136CF7A</mpp1
:Token>

          <mpp1:TransactionInput>
            <mpp1:Amount>200</mpp1:Amount>
            <mpp1:ProcessorName>Rapid Connect</mpp1:ProcessorName>
            <mpp1:TransactionInputDetails>
              <sys:KeyValuePairOfstringstring>
```

```

        <sys:key></sys:key>
        <sys:value></sys:value>
    </sys:KeyValuePairOfstringstring>
</mmppl:TransactionInputDetails>
    <mmppl:TransactionType>REFUND</mmppl:TransactionType>
</mmppl:TransactionInput>
</mmppl:ProcessTokenRequest>
</mmp:ProcessTokenRequests>
</mmp:ProcessToken>
</soapenv:Body>
</soapenv:Envelope>

```

## SAMPLE PROCESSTOKEN RESPONSE

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <ProcessTokenResponse xmlns="http://www.magensa.net/MPPGv3/">
      <ProcessTokenResult xmlns:a="http://schemas.datacontract.org/2004/07/MPPGv3WS.Core"
        xmlns:i="http://www.w3.org/2001/XMLSchema-instance">

```

```

        <a:ProcessTokenResponse>
          <a:CustomerTransactionID>123</a:CustomerTransactionID>
          <a:MPPGv3WSFault i:nil="true"/>
          <a:MagTranID>bba36e69-b81e-4894-b715-3d7479a6cadd</a:MagTranID>
          <a:TransactionOutput>
            <a:AVSResult i:nil="true"/>
            <a:AuthCode i:nil="true"/>
            <a:AuthorizedAmount>100</a:AuthorizedAmount>
            <a:CVVResult i:nil="true"/>
            <a:IsTransactionApproved>true</a:IsTransactionApproved>
            <a:IssuerAuthenticationData i:nil="true"/>
            <a:IssuerScriptTemplatel i:nil="true"/>
            <a:IssuerScriptTemplate2 i:nil="true"/>
            <a:Token i:nil="true"/>
            <a:TransactionID>000273</a:TransactionID>
            <a:TransactionMessage>APPROVAL</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 OKContent-Length: 1116

```

Content-Type: text/xml

Date: Thu, 11 May 2017 23:59:36 GMT

Server: Apache

&?xml version="1.0" encoding="UTF-8"?>

<Response Version="3" xmlns="http://securetransport.dw/rcservice/xml">

```

  <RespClientID>
    <DID>00013130461722837092</DID>
    <ClientRef>010001VRMA008</ClientRef>
  </RespClientID>
  <Status StatusCode="OK"></Status>
  <TransactionResponse>
    <ReturnCode>000</ReturnCode>
    <Payload Encoding="cdata"><![CDATA[

```

```

      <?xml version="1.0" encoding="utf-8"?><GMF
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
        xmlns="com/firstdata/Merchant/gmfV3.10"><CreditResponse><CommonGrp><PymtType>Credit</PymtType><Txn
        Type>Refund</TxnType><LocalDateTime>20170511165936</LocalDateTime><TrnmsnDateTime>20170511195926</
        TrnmsnDateTime><STAN>000273</STAN><RefNum>000000000273</RefNum><OrderNum>00000273</OrderNum><TermI
        D>00000001</TermID><MerchID>RCTST0000006242</MerchID><TxnAmt>100</TxnAmt><TxnCrcncy>840</TxnCrcncy><
        /CommonGrp><CardGrp><AcctNum></AcctNum></CardGrp><RespGrp><RespCode>000</RespCode><AddtlRespData>A
        PPROVAL</AddtlRespData></RespGrp></CreditResponse></GMF>]]]]><![CDATA[</Payload>
      </TransactionResponse>
    </Response>]]></b:value>

```



```

        </b:KeyValuePairOfstringstring>
    </a:TransactionOutputDetails>
    <a:TransactionStatus>000</a:TransactionStatus>
</a:TransactionOutput>
    <a:TransactionUTCTimestamp>2017-05-11 23:59:35Z</a:TransactionUTCTimestamp>
</a:ProcessTokenResponse>
<a:ProcessTokenResponse>
    <a:CustomerTransactionID>456</a:CustomerTransactionID>
    <a:MPPGv3WSFault i:nil="true" />
    <a:MagTranID>3ed3b24b-56c7-40d8-aceb-e9d20df318c1</a:MagTranID>
    <a:TransactionOutput>
        <a:AVSResult i:nil="true" />
        <a:AuthCode i:nil="true" />
        <a:AuthorizedAmount>200</a:AuthorizedAmount>
        <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:Token i:nil="true" />
        <a:TransactionID>000274</a:TransactionID>
        <a:TransactionMessage>APPROVAL</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 OKContent-Length: 1116
Content-Type: text/xml
Date: Thu, 11 May 2017 23:59:37 GMT
Server: Apache

&?xml version="1.0" encoding="UTF-8"?>
<Response Version="3" xmlns="http://securetransport.dw/rcservice/xml">
    <RespClientID>
        <DID>00013130461722837092</DID>
        <ClientRef>010001VRMA008</ClientRef>
    </RespClientID>
    <Status StatusCode="OK"></Status>
    <TransactionResponse>
        <ReturnCode>000</ReturnCode>
        <Payload Encoding="cdata"><![CDATA[
                <?xml version="1.0" encoding="utf-8"?><GMF
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns="com/firstdata/Merchant/gmfV3.1.0"><CreditResponse><CommonGrp><PymtType>Credit</PymtType><Txn
Type>Refund</TxnType><LocalDateTime>20170511165937</LocalDateTime><TrnmsnDateTime>20170511195927</
TrnmsnDateTime><STAN>000274</STAN><RefNum>000000000274</RefNum><OrderNum>00000274</OrderNum><TermI
D>00000001</TermID><MerchID>RCTST0000006242</MerchID><TxnAmt>200</TxnAmt><TxnCrncy>840</TxnCrncy><
/CommonGrp><CardGrp><AcctNum></AcctNum></CardGrp><RespGrp><RespCode>000</RespCode><AddtlRespData>A
PPROVAL</AddtlRespData></RespGrp></CreditResponse></GMF>]]]><![CDATA[</Payload>
        </TransactionResponse>
    </Response>]]></b:value>
        </b:KeyValuePairOfstringstring>
    </a:TransactionOutputDetails>
    <a:TransactionStatus>000</a:TransactionStatus>
</a:TransactionOutput>
    <a:TransactionUTCTimestamp>2017-05-11 23:59:35Z</a:TransactionUTCTimestamp>
</a:ProcessTokenResponse>
</ProcessTokenResult>
</ProcessTokenResponse>
</s:Body>
</s:Envelope>

```

## 2 Fault Codes and Reasons

Fault Code	Fault Reason
603	Customer code is required
604	Username is required
605	Password is required
606	Encrypted data is not valid
607	KSN is not valid
612	Track 2 is not valid
614	MagnePrint status is required
615	Customer transaction ID is not valid
617	CVV is not valid
618	ZIP is not valid
619	Amount is not valid
628	PAN is not valid
629	Expiration date is not valid
630	Name on card 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
652	Token data is not valid
659	Processor name is not valid
701	Access Denied
702	Device not allowed
708	Encryption type is required
712	Decrypt web service failed
716	Invalid track data after decryption
745	Token parsing failed
5000	Unknown Error