

Network Tokenization

Integration Guide

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Network Tokenization

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Introduction

Network tokens are surrogate values that replace Primary Account Number (PAN) stored electronically throughout the payments system. Network Tokens can be used to conduct payment transactions securely and can provide improved protection against fraud, because network tokens can require cryptogram validation or be limited to use in a specific domain or circumstance, such as token requestor, device or channel.

The purpose of this guide is to describe the process how to generate and use the network tokens in the Gateway.

Initial Setup and Conditions

In order to utilize network tokens, it is necessary to change predefined value of the MCS' Data Vault service configuration item "tokenProvider" to "ipgHosteddataWithNetworkToken".

Please contact your boarding team or customer support team to manage the setup for you.

In case you are located in India, due to compliance requirements you need to obtain and capture customer's consent and perform Strong Customer Authentication (SCA) before customer's credit card is tokenized. You can authenticate your customer by using a 3-D Secure request followed by successful authorization which thereby provides you with the permission to request a network token.

Network Token Generation

In order to request a network token to store the credit card information you used in the previous step in which the customer consent was captured, you need to send an action request to the Gateway and provide 'Orderld' and 'HostedDatalD' of this transaction.

The following XML document represents an example of a request including your own 'HostedDataID':

A network token is provisioned by the Gateway for the card data used in submitted 'Orderld' and linked to the 'HostedDataID' you have provided in the previous request. The call to retrieve a token from the schemes is made by our system automatically.

You will be provided with a response, if the request has been completed successfully:

In case you are integrated with the Gateway via REST API, for the same scenario as described above you need to use "requestType" = "ReferencedOrderPaymentTokenizationRequest"

The following json document represents an example of a request including your own token:

POST /v2/services/payment-tokens

```
POST https://test.ipg-online.com/ipgrestapi/v2/services/payment-tokens

{
    "requestType": "ReferencedOrderPaymentTokenizationRequest",
    "referencedOrderId": "C-8a820c97-03e5-4045-83ff-a9b5976ab0c9",
    "storeId": "330995118",
    "createToken": {
```

```
"value": "TEST125"
}
}
```

A network token is provisioned by the Gateway for the card data used in submitted 'Orderld' and linked to the 'paymentToken' value you have provided in the previous request. The call to retrieve a token from the schemes is made by our system automatically.

In case you do not wish to define your own 'HostedDataID' in your token provisioning request, the Gateway will generate its value for you and you will obtain it in the API response.

The following XML document represents an example of a request without submitted 'HostedDataID':

You can use the 'HostedDataID' linked to a network token for further transaction processing.

If you are using REST API and you do not wish to define your own 'paymentToken' value in your token provisioning request, the Gateway will generate this value for you and you will obtain it in the API response.

The following json document represents an example of a request without submitted 'paymentToken':

POST /v2/services/payment-tokens

```
POST https://test.ipg-online.com/ipgrestapi/v2/services/payment-tokens
    "requestType": "ReferencedOrderPaymentTokenizationRequest",
    "referencedOrderId": "C-8a820c97-03e5-4045-83ff-a9b5976ab0c9",
    "storeId": "330995118",
    "createToken": {
          }
}
The following json document represents an example of the response including generated 'paymentToken':
    "clientRequestId": "2838649",
    "apiTraceId": "YbsAhUr75THtfN2sdqvVhQAAA8E",
    "requestStatus": "SUCCESS",
    "requestTime": 1639645317009,
    "paymentToken": {
        "value": "FF2E6982-BA39-477D-A486-D6970846DE80",
        "reusable": true,
        "declineDuplicates": false,
        "last4": "3006",
        "brand": "MASTERCARD",
        "accountVerification": false,
        "type": "PAYMENT_CARD"
    }
}
```

Initiate payment transactions using HostedDataID

With generated 'HostedDataID' you can perform transactions without the need to pass the credit card or bank account data again.

Please note, that it is not allowed to store the card code (in most cases on the back of the card) so that for credit card transactions, the cardholder still needs to enter this value.

```
<SOAP-ENV:Envelope
    xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
        <ns4:IPGApiOrderRequest
            xmlns:ns4="http://ipg-online.com/ipgapi/schemas/ipgapi"
            xmlns:ns2="http://ipg-online.com/ipgapi/schemas/v1"
            xmlns:ns3="http://ipg-online.com/ipgapi/schemas/a1">
            <ns2:Transaction>
                <ns2:CreditCardTxType>
                    <ns2:StoreId>330115006</ns2:StoreId>
                    <ns2:Type>sale</ns2:Type>
                </ns2:CreditCardTxType>
                <ns2:CreditCardData>
                    <ns2:CardCodeValue>999/ns2:CardCodeValue>
                </ns2:CreditCardData>
                <ns2:Payment>
                         <ns2:HostedDataID>CD0A6414-B78C-40B0-9D1F-90F16C32952F/ns2:HostedDataID>
                         <ns2:ChargeTotal>500.00</ns2:ChargeTotal>
                         <ns2:Currency>356</ns2:Currency>
                </ns2:Payment>
            </ns2:Transaction>
        </ns4:IPGApiOrderRequest>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Initiate payment transactions using Network Token and Cryptogram

You can also perform a transaction using network token and cryptogram instead of using HostedDataID. Network token and a cryptogram will be provided in the API response after you submitted the following action request to the Gateway:

```
<SOAP-ENV:Envelope
xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Header/>
<SOAP-ENV:Body>
<ns4:IPGApiActionRequest</pre>
xmlns:ns4="http://ipg-online.com/ipgapi/schemas/ipgapi"
xmlns:ns2="http://ipg-online.com/ipgapi/schemas/a1"
xmlns:ns3="http://ipg-online.com/ipgapi/schemas/v1">
    <ns2:Action>
       <ns2:GetNetworkTokenCryptogram>
            <ns2:StoreId>330115006
            <ns2:HostedDataID>A03D6777-D729-4C35-A556-8D6B285E440D/ns2:HostedDataID>
        </ns2:GetNetworkTokenCryptogram>
    </ns2:Action>
</ns4:IPGApiActionRequest>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

The following XML document represents the example of the response including associated credit card details, token number and token cryptogram.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
     <SOAP-ENV:Header/>
     <SOAP-ENV:Body>
         <ipgapi:IPGApiActionResponse</pre>
xmlns:a1="http://ipg-online.com/ipgapi/schemas/a1"
xmlns:ipgapi="http://ipg-online.com/ipgapi/schemas/ipgapi"
xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
              <ipgapi:successfully>true</ipgapi:successfully>
              <ipgapi:NetworkTokenData>
                   <v1:NetworkTokenNumber>
5204736200180216

</p
                   <v1:ExpMonth>12</v1:ExpMonth>
                   <v1:ExpYear>24</v1:ExpYear>
                   <v1:CardLast4>3006</v1:CardLast4>
                   <v1:Brand>MASTERCARD</v1:Brand>
                   <v1:TokenCryptogram>AJ0BWvQnt0kiAAHFcQ42GgADFA==</v1:TokenCryptogram>
              </ipgapi:NetworkTokenData>
         </ipgapi:IPGApiActionResponse>
     </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Received data can be used to trigger a sale or preauth request.

A payment transaction using network token can be initiated by submitting the network token number you received in previous API response as a value of the element 'CardNumber' and the expiry date of the credit card replaced by the network token expiry. It is important to include the 'TokenCryptogram' in the request as well.

The following XML document represents an example of a Sale transaction using network token and token cryptogram elements:

```
<soapenv:Envelope</pre>
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ipg="http://ipg-online.com/ipgapi/schemas/ipgapi"
xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1"
   <soapenv:Header/>
   <soapenv:Body>
      <ipg:IPGApiOrderRequest>
         <v1:Transaction>
            <v1:CreditCardTxType>
               <v1:StoreId>330115006</v1:StoreId>
               <v1:Type>sale</v1:Type>
            </v1:CreditCardTxType>
            <v1:CreditCardData>
               <v1:CardNumber>520473*****0216</v1:CardNumber>
               <v1:ExpMonth>12</v1:ExpMonth>
               <v1:ExpYear>24</v1:ExpYear>
               <v1:CardCodeValue>XXX</v1:CardCodeValue>
               <v1:Brand>MASTERCARD</v1:Brand>
            </v1:CreditCardData>
            <v1:TokenCryptogram>AJ0BWvQntOkiAAHFcQ42GgADFA==</v1:TokenCryptogram>
               <v1:ChargeTotal>150</v1:ChargeTotal>
               <v1:Currency>INR</v1:Currency>
            </v1:Payment>
          </v1:Transaction>
      </ipg:IPGApiOrderRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

The following XML document represents an example of the API response:

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
    <ipgapi:IPGApiOrderResponse</pre>
xmlns:a1="http://ipg-online.com/ipgapi/schemas/a1"
xmlns:ipgapi="http://ipg-online.com/ipgapi/schemas/ipgapi"
xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
        <ipgapi:ApprovalCode>Y:006953:4381648535:PPX:113009626785</ipgapi:ApprovalCode>
        <ipgapi:AVSResponse>PPX</ipgapi:AVSResponse>
        <ipgapi:Brand>MASTERCARD</ipgapi:Brand>
        <ipgapi:CommercialServiceProvider>IMS</ipgapi:CommercialServiceProvider>
        <ipgapi:OrderId>A-d47b2da7-f64d-475f-8d1f-75be94d1419b</ipgapi:OrderId>
        <ipgapi:IpgTransactionId>84381648535</ipgapi:IpgTransactionId>
        <ipgapi:PaymentType>CREDITCARD</ipgapi:PaymentType>
        <ipgapi:ProcessorApprovalCode>006953</ipgapi:ProcessorApprovalCode>
        <ipgapi:ProcessorReferenceNumber>113009626785</ipgapi:ProcessorReferenceNumber>
```

You can also use a REST API request to perform a transaction using network token and cryptogram. Network token and a cryptogram will be provided in the response after you submitted the following request to the Gateway:

POST /v2/services/payment-tokens/{paymentTokenValue}/cryptogram

 $POST\ https://test.ipg-online.com/ipgrestapi/v2/services/payment-tokens/FF2E6982-BA39-477D-A486-D6970846DE80/cryptogram$

```
{
    "storeId": "330995118"
}
```

Below is the example of the response including associated credit card details, network token number/value and token cryptogram.

Received data can be used to trigger a sale or preAuth request.

Please note, that in case you are located in European Union or India, you are mandated to perform 3-D Secure authentication for every ecommerce transaction. In case you are using network tokens with such transaction, you need to include tokenCryptogram element in all sale/preAuth requests for all 3DS protocols (1.0.2, 2.1 and 2.2).

The following XML document represents an example of a Sale transaction using network token and token cryptogram elements together with 3DS v2 authentication call:

```
<SOAP-ENV:Envelope
xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
<SOAP-ENV:Header/>
```

```
<SOAP-ENV: Body>
                                <ns4:IPGApiOrderRequest
                                               xmlns:ns4="http://ipg-online.com/ipgapi/schemas/ipgapi"
                                               xmlns:ns2="http://ipg-online.com/ipgapi/schemas/v1
                                               xmlns:ns3="http://ipg-online.com/ipgapi/schemas/a1">
                                                <ns2:Transaction>
                                                                <ns2:CreditCardTxType>
                                                                                <ns2:StoreId>330995118</ns2:StoreId>
                                                                                <ns2:Type>sale</ns2:Type>
                                                                </ns2:CreditCardTxType>
                                                                <ns2:CreditCardData>
                                                                               <ns2:CardNumber>520473******0216/ns2:CardNumber>
                                                                               <ns2:ExpMonth>12</ns2:ExpMonth>
                                                                               <ns2:ExpYear>24</ns2:ExpYear>
                                                                                <ns2:CardCodeValue>XXX</ns2:CardCodeValue>
                                                                                 <ns2:Brand>MASTERCARD</ns2:Brand>
                                                                </ns2:CreditCardData>
                                                                 <ns2:TokenCryptogram>AJ0BWvQntOkiAAHFcQ42GgADFA==</ns2:TokenCryptogram>
                                                                <ns2:CreditCard3DSecure>
<ns2:AuthenticateTransaction>true</ns2:AuthenticateTransaction>
<\!ns2: TermUrl> https://test.ipg.com/webshop/simulator/secure3d/return</ns2: TermUrl> https://test.ipg.com/webshop/simulator/secure3d/return</nr2: TermUrl
<\!ns2: ThreeDSMethodNotificationURL> https://test.ipg-online.com/secure3 ds <\!/ns2: ThreeDSMethodNotificationURL> https://test.ipg-online.com/secure3 ds <\ndotserved by the secure by the se
<ns2:ThreeDSRequestorChallengeIndicator>01</ns2:ThreeDSRequestorChallengeIndicator>
<ns2:ThreeDSRequestorChallengeWindowSize>01</ns2:ThreeDSRequestorChallengeWindowSize>
<ns2:ThreeDSEmvCoMessageCategory>01</ns2:ThreeDSEmvCoMessageCategory>
                                                                </ns2:CreditCard3DSecure>
                                                                <ns2:Payment>
                                                                               <ns2:ChargeTotal>100.00</ns2:ChargeTotal>
                                                                                <ns2:Currency>INR</ns2:Currency>
                                                                </ns2:Payment>
                                                </ns2:Transaction>
                                </ns4:IPGApiOrderRequest>
                </SOAP-FNV:Body>
</SOAP-ENV:Envelope>
```

3-D Secure authentication and subsequent Sale transaction are performed as per standard process described on our online portal: https://docs.firstdata.com/org/gateway/node/476

The following json document represents an example of a Sale transaction using network token and token cryptogram with 3DS v1 via REST API:

POST /v2/services/payments

```
{
    "requestType": "PaymentCardSaleTransaction",
    "storeId": "330995118",
    "transactionAmount": {
        "total": "178.00",
        "currency": "INR"
    },
    "transactionOrigin": "ECOM",
    "paymentMethod": {
        "paymentCard": {
            "number": "5204736200113910",
            "securityCode": "XXX",
            "cardFunction": "DEBIT",
            "expiryDate": {
```

POST https://test.ipg-online.com/ipgrestapi/v2/services/payments

```
"month": "12",
                "year": "24"
            }
        }
    },
    "authenticationRequest": {
        "authenticationType": "Secure3DAuthenticationRequest",
        "termURL": "https://test.ipg-online.com/webshop/simulator/secure3d/return",
        "methodNotificationURL": "https://test.test/notify",
        "messageCategory": "01"
    },
    "order": {
        "tokenCryptogram": "AGX11vbY1ypcAAFHV22IGgADFA=="
    }
}
In the response you will obtain authentication parameters, what should be used in the next call to the Gateway:
{
    "clientRequestId": "2838649",
    "apiTraceId": "YbsF-DfjEh@p8a4GDb3JSQAAA2Y",
    "ipgTransactionId": "84385055093",
    "orderId": "R-f98d11be-9bea-419b-9645-1c4404971c10",
    "transactionType": "SALE",
    "paymentToken": {
        "reusable": true,
        "declineDuplicates": false,
        "brand": "MASTERCARD",
        "type": "PAYMENT_CARD"
    },
    "transactionOrigin": "ECOM",
    "paymentMethodDetails": {
        "paymentCard": {
            "expiryDate": {
                "month": "12",
                "year": "2024"
            },
            "cardFunction": "DEBIT",
            "bin": "520473",
            "last4": "3910",
            "brand": "MASTERCARD"
        "paymentMethodType": "PAYMENT_CARD"
    },
    "transactionTime": 1639646716,
    "transactionStatus": "WAITING",
    "approvalCode": "?:waiting 3dsecure",
    "authenticationResponse": {
        "type": "3D_SECURE",
        "version": "1.0",
        "<mark>params</mark>": {
            "payerAuthenticationRequest": "eJxVUslywjAM........07LxXdr4L6/27lx8yoLp8",
            "termURL": "https://test.ipg-online.com/webshop/simulator/secure3d/return",
            "merchantData": "MD
                                       17800202112160925162356Y70jntZ3r1/WkioPvj95VgnXdfI= 111111
                        R-f98d11be-9bea-419b-
     470000032001125
96450ww
                                                                                                  return-
```

The complete process how to perform 3-D Secure via REST API is described on our online portal: https://docs.firstdata.com/org/gateway/node/1682

It is important to include the element "tokenCryptogram" in your PATCH request to the original transaction, once you received the response from the ACS about the successful authentication:

PATCH /v2/services/payments/{transaction-id}

```
https://test3.ipg-online.com/ipgrestapi/v2/services/payments/84385055093
```

The following json document represents an example of the response you will receive after successfully authenticated and authorized transaction using token cryptogram:

```
"clientRequestId": "2838649",
"apiTraceId": "YbsG@MItojOb3pFHVNWOygAAA7w",
"ipgTransactionId": "84385055093",
"orderId": "R-f98d11be-9bea-419b-9645-1c4404971c10",
"transactionType": "SALE",
"paymentToken": {
    "reusable": true,
    "declineDuplicates": false,
    "brand": "MASTERCARD",
    "type": "PAYMENT_CARD"
"transactionOrigin": "ECOM",
"paymentMethodDetails": {
    "paymentCard": {
        "expiryDate": {
            "month": "12",
            "year": "2024"
        "cardFunction": "DEBIT",
```

{

```
"bin": "520473",
            "last4": "3910",
            "brand": "MASTERCARD"
       },
        "paymentMethodType": "PAYMENT_CARD"
   },
    "terminalId": "00001115",
    "merchantId": "470000032001125",
    "transactionTime": 1639646716,
    "approvedAmount": {
        "total": 178,
        "currency": "INR",
        "components": {
            "subtotal": 178
    },
    "transactionStatus": "APPROVED",
    "approvalCode": "Y:006973:4385055093:PPX :121609639289",
    "secure3dResponse": {
        "responseCode3dSecure": "1"
    },
    "processor": {
        "referenceNumber": "121609639289",
        "authorizationCode": "006973",
        "responseCode": "00",
        "responseMessage": "Function performed error-free",
        "avsResponse": {
            "streetMatch": "NO_INPUT_DATA",
            "postalCodeMatch": "NO_INPUT_DATA"
        }
   }
}
```

Display Stored Network Token Details

For cases when you would like to get information about the network token associated with your store and HostedDatald, you can use a display function with submitting the StoreID and HostedDataID in your request:

```
<soapenv:Envelope</pre>
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ipg="http://ipg-online.com/ipgapi/schemas/ipgapi"
xmlns:a1="http://ipg-online.com/ipgapi/schemas/a1"
xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
   <soapenv:Header/>
   <soapenv:Body>
<ns4:IPGApiActionRequest</pre>
xmlns:ns4="http://ipg-online.com/ipgapi/schemas/ipgapi"
xmlns:ns2="http://ipg-online.com/ipgapi/schemas/a1"
xmlns:ns3="http://ipg-online.com/ipgapi/schemas/v1">
         <ns2:Action>
                <ns2:StoreHostedData>
                    <ns2:StoreId>330115006/ns2:StoreId>
                    <ns2:DataStorageItem>
                          <ns2:Function>display</ns2:Function>
                           <ns2:HostedDataID>A03D6777-D729-4C35-A556-8D6B285E440D/ns2:HostedDataID>
                    </ns2:DataStorageItem>
                </ns2:StoreHostedData>
            </ns2:Action>
        </ns4:IPGApiActionRequest>
   </soapenv:Body>
</soapenv:Envelope>
You will receive the details in the API response:
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
        <ipgapi:IPGApiActionResponse</pre>
xmlns:a1="http://ipg-online.com/ipgapi/schemas/a1"
xmlns:ipgapi="http://ipg-online.com/ipgapi/schemas/ipgapi"
xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
            <ipgapi:successfully>true</ipgapi:successfully>
            <ipgapi:DataStorageItem>
                <a1:NetworkTokenData>
                    <v1:NetworkTokenNumber>520473******0216</v1:NetworkTokenNumber>
                    <v1:ExpMonth>12</v1:ExpMonth>
                    <v1:ExpYear>24</v1:ExpYear>
                    <v1:Brand>MASTERCARD</v1:Brand>
                </a1:NetworkTokenData>
                <a1:HostedDataID>A03D6777-D729-4C35-A556-8D6B285E440D</a1:HostedDataID>
            </ipgapi:DataStorageItem>
        </ipgapi:IPGApiActionResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

The same action can be performed using REST API:

GET /v2/services/payment-tokens/{paymentTokenValue}

GET https://test.ipg-online.com/ipgrestapi/v2/services/payment-tokens/FF2E6982-BA39-477D-A486-D6970846DE80

The following json document represents an example of API response:

```
"clientRequestId": "2838649",
"apiTraceId": "YbsJPn4TVn0bWRZH6wmlegAAAuc",
"requestStatus": "SUCCESS",
"requestTime": 1639647550653,
"paymentToken": {
        "value": "FF2E6982-BA39-477D-A486-D6970846DE80",
        "reusable": false,
        "brand": "MASTERCARD",
        "type": "PAYMENT_CARD"
},
"networkToken": {
        "value": "520473******4958",
        "expiryMonth": "01",
        "expiryYear": "25"
}
```

Store payment information without performing a transaction at the same time

For cases where you would prefer to store credit card details without performing a transaction at the same time, you can submit an action request including credit card details as on example below:

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Bodv>
        <ns4:IPGApiActionRequest
xmlns:ns2="http://ipg-online.com/ipgapi/schemas/a1"
xmlns:ns3="http://ipg-online.com/ipgapi/schemas/v1"
xmlns:ns4="http://ipg-online.com/ipgapi/schemas/ipgapi">
            <ns2:Action>
                <ns2:StoreHostedData>
                    <ns2:StoreId>330115006</ns2:StoreId>
                    <ns2:DataStorageItem>
                        <ns2:CreditCardData>
                            <ns3:CardNumber>5204736190003006/ns3:CardNumber>
                            <ns3:ExpMonth>12</ns3:ExpMonth>
                            <ns3:ExpYear>24</ns3:ExpYear>
                            <ns3:CardCodeValue>006</ns3:CardCodeValue>
                        </ns2:CreditCardData>
                        <ns2:AssignToken>true</ns2:AssignToken>
                    </ns2:DataStorageItem>
                </ns2:StoreHostedData>
            </ns2:Action>
        </ns4:IPGApiActionRequest>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Please note, that you have to obtain customer's consent and perform additional strong customer authentication via 3-D Secure before submitting the request to store card credentials.

You will get assigned 'HostedDataID' in the API response:

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
        <ipgapi:IPGApiActionResponse</pre>
xmlns:a1="http://ipg-online.com/ipgapi/schemas/a1"
xmlns:ipgapi="http://ipg-online.com/ipgapi/schemas/ipgapi"
xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
            <ipgapi:successfully>true</ipgapi:successfully>
            <ipgapi:DataStorageItem>
                <a1:CreditCardData>
                    <v1:CardNumber>3006</v1:CardNumber>
                    <v1:ExpMonth>12</v1:ExpMonth>
                    <v1:ExpYear>24</v1:ExpYear>
                    <v1:Brand>MASTERCARD</v1:Brand>
                </a1:CreditCardData>
                <a1:HostedDataID>A03D6777-D729-4C35-A556-8D6B285E440D</a1:HostedDataID>
```

```
</ipgapi:DataStorageItem>
    </ipgapi:IPGApiActionResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

The same action using REST API requires you to set 'accountVerification' element to "false":

POST /v2/services/payment-tokens

Token Cryptogram in Connect / Hosted Payment Pages

You can use Network Tokens also with our Connect / Hosted Payment Pages solution. You can send a transaction request using Network Token value submitted in "cardnumber" field together with "tokenCryptogram".

The following represents an example of a 'Sale' transaction request including "tokenCryptogram" and Network Token value filled out in the "cardnumber" field:

```
<!-- #include file="ipg-util.asp"-->
<html>
<head><title>IPG Connect Sample for ASP</title></head>
<body>
<h1>0rder Form</h1>
<form method="post" action=" https://test.ipg-online.com/connect/gateway/processing</pre>
    <input type="hidden" name="txntype" value="sale">
    <input type="hidden" name="checkoutoption" value="combinedpage">
    <input type="hidden" name="timezone" value="Europe/Berlin"/>
    <input type="hidden" name="txndatetime" value="<% getDateTime() %>"/>
    <input type="hidden" name="hash_algorithm" value="HMACSHA256"/>
    <input type="hidden" name="hashExtended" value="<% call createExtendedHash(</pre>
"13.00", "978" ) %>"/>
    <input type="hidden" name="storename" value="1109950006" />
    <input type="hidden" name="mode" value="payonly"/>
    <input type="hidden" name="paymentMethod" value="M"/>
    <input type="text" name="chargetotal" value="130.00" />
    <input type="hidden" name="currency" value="978"/>
    <input type="hidden" name="authenticateTransaction" value="true"/>
    <input type="hidden" name="threeDSRequestorChallengeIndicator" value="1"/>
    <input type="hidden" name="tokenCryptogram" value="AGX11vbY1ypcAAV22IGgADFA=="/>
    <input type="text" name="cardnumber" value="540215******2355">
<input type="text" name="expmonth" value="12">
    <input type="text" name="expyear" value="24">
    <input type="submit" value="Submit">
</form>
</body>
</html>
```

Store Token information when performing a transaction

For configured store, to save network token, Send the parameter HostedDataID or AssignToken "true" together with the transaction data as a unique identification for the payment information in this transaction, then for the incoming Card, IPG will provision the Token and Link the Hosteddata to Token.

There is no change in the Transaction Request API using hosteddata. Refer to SOAP/REST/Connect guides for Data Vault/hosted data request.

In case of failure of provisioning network token, error message will be notified to merchant.

Please note, that in case you are located in European Union or India, you are mandated to perform 3-D Secure authentication for every ecommerce transaction.

Sale with successful provisioning of Network Token

SOAP API

The following XML document represents an example of a Sale transaction, where token information stored when performing a transaction.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ipg="http://ipg-</pre>
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-
online.com/ipgapi/schemas/v1 xmlns:pay="http://api.clickandbuy.com/webservices/pay_1_0_0/">
    <soapenv:Header/>
    <soapenv:Body>
        <ipg:IPGApiOrderRequest>
            <v1:Transaction>
                <v1:CreditCardTxType>
                    <v1:StoreId>330995118</v1:StoreId>
                    <v1:Type>sale</v1:Type>
                </v1:CreditCardTxType>
                <v1:CreditCardData>
                    <v1:CardNumber>520473*****3014</v1:CardNumber>
                    <v1:ExpMonth>12</v1:ExpMonth>
                    <v1:ExpYear>22</v1:ExpYear>
                    <v1:CardCodeValue>XXX</v1:CardCodeValue>
                </v1:CreditCardData>
                <v1:Payment>
                    <v1:ChargeTotal>15</v1:ChargeTotal>
                    <v1:Currency>INR</v1:Currency>
                    <v1:AssignToken>true</v1:AssignToken>
                </v1:Payment>
            </v1:Transaction>
        </ipg:IPGApiOrderRequest>
    </soapenv:Body>
</soapenv:Envelope>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV: Body>
        <ipgapi:IPGApiOrderResponse xmlns:a1="http://ipg-</pre>
online.com/ipgapi/schemas/a1" xmlns:ipgapi="http://ipg-
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
            <ipgapi:ApprovalCode>Y:010460:4597728244:PPX :051501361480</ipgapi:ApprovalCode>
```

```
<ipgapi:AVSResponse>PPX</ipgapi:AVSResponse>
           <ipgapi:Brand>MASTERCARD</ipgapi:Brand>
           <ipgapi:CommercialServiceProvider>IMS</ipgapi:CommercialServiceProvider>
           <ipgapi:OrderId>A-09a9b34c-982d-490f-8976-79aa5498b724</ipgapi:OrderId>
           <ipgapi:IpgTransactionId>84597728244</ipgapi:IpgTransactionId>
           <ipgapi:PaymentType>CREDITCARD</ipgapi:PaymentType>
           <ipgapi:ProcessorApprovalCode>010460</ipgapi:ProcessorApprovalCode>
           <ipgapi:ProcessorReferenceNumber>051501361480</ipgapi:ProcessorReferenceNumber>
           <ipgapi:ProcessorResponseCode>00</ipgapi:ProcessorResponseCode>
            <ipgapi:ProcessorResponseMessage>Function performed error-
free</ipgapi:ProcessorResponseMessage>
           <ipgapi:SchemeTransactionId>MCC011DBL0515</ipgapi:SchemeTransactionId>
           <ipgapi:TDate>1652578656</ipgapi:TDate>
           <ipgapi:TDateFormatted>2022.05.15 03:37:36 (CEST)</ipgapi:TDateFormatted>
           <ipgapi:TerminalID>00001115</ipgapi:TerminalID>
           <ipgapi:TransactionResult>APPROVED</ipgapi:TransactionResult>
           <ipgapi:TransactionTime>1652578656</ipgapi:TransactionTime>
            <ipgapi:HostedData>
           <ipgapi:HostedDataID>DF790CA1-5613-4294-8188-CD09C5A76E2B
            <ipgapi:IssuerReferenceNumber>051501361480</ipgapi:IssuerReferenceNumber>
        </ipgapi:IPGApiOrderResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

REST API

You can also use a REST API request to store Token Information when performing a transaction.

POST /v2/services/payments/

```
"requestType": "PaymentCardSaleTransaction",
    "storeId": "330995118",
    "transactionAmount": {
        "total": "19.50",
        "currency": "INR"
    },
    "paymentMethod": {
        "paymentCard": {
            "number": "520473*****3014",
            "securityCode": "XXX",
            "expiryDate": {
                 "month": "12",
                 "year": "24"
            }
        }
    },
    "createToken": {
        "reusable": true,
        "declineDuplicates": false
    }
}
```

```
{
    "clientRequestId": "2838649",
    "apiTraceId": "YoDFgMwXx0N9GNSAVNgPTwAAA7I",
    "ipgTransactionId": "84597737848",
    "orderId": "R-5260bc37-f334-4062-8fc3-a7b73577a61f",
    "transactionType": "SALE",
    "paymentToken": {
        "value": "029C43C4-FB0F-4909-9253-D1D1A503D9FF",
        "reusable": true,
        "declineDuplicates": false,
        "brand": "MASTERCARD",
        "type": "PAYMENT_CARD"
    },
    "transactionOrigin": "ECOM",
    "paymentMethodDetails": {
        "paymentCard": {
            "expiryDate": {
                "month": "12",
                "year": "2024"
            },
            "bin": "520473",
            "last4": "3014",
            "brand": "MASTERCARD"
        },
        "paymentMethodType": "PAYMENT_CARD"
    },
    "terminalId": "00001115",
    "merchantId": "470000032001125",
    "transactionTime": 1652606336,
    "approvedAmount": {
        "total": 19.50,
        "currency": "INR",
        "components": {
            "subtotal": 19.50
        }
    },
    "transactionStatus": "APPROVED",
    "approvalCode": "Y:010484:4597737848:PPX :051509362796",
    "schemeTransactionId": "MCC011DP20515",
    "processor": {
        "referenceNumber": "051509362796",
        "authorizationCode": "010484",
        "responseCode": "00",
        "responseMessage": "Function performed error-free",
        "avsResponse": {
            "streetMatch": "NO_INPUT_DATA",
            "postalCodeMatch": "NO_INPUT_DATA"
        }
   }
}
```

Sale with Failure in provisioning of Network Token

In case of any error while provisioning the token for a given card number, gateway will send the provisioning error details as highlighted below:

SOAP API

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ipg="http://ipg-</pre>
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-
on line.com/ipgapi/schemas/v1" \ xmlns:pay="http://api.clickandbuy.com/webservices/pay\_1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0\_0/">1\_0_0/">1\_0_0/">1\_0_0/">1\_0_0/">1\_0_0/">1\_0_0/">1\_0_0/">1\_0_0/">1\_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0/">1_0_0
        <soapenv:Header/>
        <soapenv:Body>
                <ipg:IPGApiOrderRequest>
                        <v1:Transaction>
                                 <v1:CreditCardTxType>
                                         <v1:StoreId>330995118</v1:StoreId>
                                         <v1:Type>sale</v1:Type>
                                 </v1:CreditCardTxType>
                                 <v1:CreditCardData>
                                         <v1:CardNumber>542606*****4979</v1:CardNumber>
                                         <v1:ExpMonth>12</v1:ExpMonth>
                                         <v1:ExpYear>22</v1:ExpYear>
                                         <v1:CardCodeValue>XXX</v1:CardCodeValue>
                                 </v1:CreditCardData>
                                 <v1:Payment>
                                         <v1:ChargeTotal>15</v1:ChargeTotal>
                                         <v1:Currency>INR</v1:Currency>
                                         <v1:AssignToken>true</v1:AssignToken>
                                 </v1:Payment>
                        </v1:Transaction>
                </ipg:IPGApiOrderRequest>
        </soapenv:Body>
</soapenv:Envelope>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
        <SOAP-ENV:Header/>
        <SOAP-ENV:Body>
                <ipgapi:IPGApiOrderResponse xmlns:a1="http://ipg-</pre>
online.com/ipgapi/schemas/a1" xmlns:ipgapi="http://ipg-
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
                         <ipgapi:ApprovalCode>Y:010459:4597728240:PPX :051501361448/ipgapi:ApprovalCode>
                        <ipgapi:AVSResponse>PPX</ipgapi:AVSResponse>
                        <ipgapi:Brand>MASTERCARD</ipgapi:Brand>
                        <ipgapi:Country>DEU</ipgapi:Country>
                        <ipgapi:CommercialServiceProvider>IMS</ipgapi:CommercialServiceProvider>
                        <ipgapi:OrderId>A-551c5589-4e6d-4ff6-a5c5-f9eacd3f1f4a</ipgapi:OrderId>
                        <ipgapi:IpgTransactionId>84597728240</ipgapi:IpgTransactionId>
                        <ipgapi:PaymentType>CREDITCARD</ipgapi:PaymentType>
                        <ipgapi:ProcessorApprovalCode>010459</ipgapi:ProcessorApprovalCode>
                        <ipgapi:ProcessorReferenceNumber>051501361448/ipgapi:ProcessorReferenceNumber>
                        <ipgapi:ProcessorResponseCode>00</ipgapi:ProcessorResponseCode>
                         <ipgapi:ProcessorResponseMessage>Function performed error-
free</ipgapi:ProcessorResponseMessage>
                        <ipgapi:SchemeTransactionId>MCC011DBG0515</ipgapi:SchemeTransactionId>
                         <ipgapi:TDate>1652578414</ipgapi:TDate>
                         <ipgapi:TDateFormatted>2022.05.15 03:33:34 (CEST)/ipgapi:TDateFormatted>
```

REST API

You can also use REST API request to store Token Information when performing a transaction.

POST /v2/services/payments/

```
"requestType": "PaymentCardSaleTransaction",
    "storeId": "330995118",
    "transactionAmount": {
        "total": "19.50",
        "currency": "INR"
    "paymentMethod": {
        "paymentCard": {
            "number": "542606*****4979",
            "securityCode": "XXX",
            "expiryDate": {
                "month": "12",
                "year": "24"
            }
        }
    },
    "createToken": {
        "reusable": true,
        "declineDuplicates": false
}
    "clientRequestId": "2838649",
    "apiTraceId": "YoDWzDf@mj4xMew5wloKyQAAAr8",
    "ipgTransactionId": "84597739024",
    "orderId": "R-d842f6f3-d297-444f-bef0-1383214e364c",
    "transactionType": "SALE",
    "paymentToken": {
        "reusable": true,
        "declineDuplicates": false,
        "brand": "MASTERCARD",
```

```
"type": "PAYMENT_CARD",
        "error": {
            "code": "NT-03",
            "message": "Processing error while provisioning network token"
   },
    "transactionOrigin": "ECOM",
    "paymentMethodDetails": {
        "paymentCard": {
            "expiryDate": {
                "month": "12",
                "year": "2024"
            "bin": "542606",
            "last4": "4979",
            "brand": "MASTERCARD"
        "paymentMethodType": "PAYMENT_CARD"
    },
    "country": "Germany",
    "terminalId": "00001115",
    "merchantId": "470000032001125",
    "transactionTime": 1652610764,
    "approvedAmount": {
        "total": 19.50,
        "currency": "INR",
        "components": {
            "subtotal": 19.50
    },
    "transactionStatus": "APPROVED",
    "approvalCode": "Y:010489:4597739024:PPX :051510362838",
    "schemeTransactionId": "MCC011DR80515",
    "processor": {
        "referenceNumber": "051510362838",
        "authorizationCode": "010489",
        "responseCode": "00",
        "responseMessage": "Function performed error-free",
        "avsResponse": {
            "streetMatch": "NO_INPUT_DATA",
            "postalCodeMatch": "NO_INPUT_DATA"
        }
   }
}
```

3DS Sale with successful provisioning of Network Token

SOAP API

The following XML document represents an example of a 3DS Sale transaction, where token information stored when performing a transaction. Please note that hosteddata id will be sent only in the final request of MPI VIA API flow.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV: Body>
        <ns4:IPGApiOrderRequest xmlns:ns4="http://ipg-</pre>
online.com/ipgapi/schemas/ipgapi" xmlns:ns2="http://ipg-
online.com/ipgapi/schemas/v1" xmlns:ns3="http://ipg-online.com/ipgapi/schemas/a1">
            <ns2:Transaction>
                <ns2:CreditCardTxType>
                    <ns2:StoreId>330995118/ns2:StoreId>
                    <ns2:Type>sale</ns2:Type>
                </ns2:CreditCardTxType>
                <ns2:CreditCardData>
                    <ns2:CardNumber>520473*****3014</ns2:CardNumber>
                    <ns2:ExpMonth>12</ns2:ExpMonth>
                    <ns2:ExpYear>22</ns2:ExpYear>
                    <ns2:CardCodeValue>014</ns2:CardCodeValue>
                </ns2:CreditCardData>
                <ns2:CreditCard3DSecure>
                    <ns2:AuthenticateTransaction>true</ns2:AuthenticateTransaction>
                </ns2:CreditCard3DSecure>
                <ns2:Pavment>
                    <ns2:ChargeTotal>13.99</ns2:ChargeTotal>
                    <ns2:Currency>356</ns2:Currency>
                    <ns2:AssignToken>true</ns2:AssignToken>
                </ns2:Payment>
            </ns2:Transaction>
        </ns4:IPGApiOrderRequest>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
        <ipgapi:IPGApiOrderResponse xmlns:a1="http://ipg-</pre>
online.com/ipgapi/schemas/a1" xmlns:ipgapi="http://ipg-
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
            <ipgapi:ApprovalCode>?:waiting 3dsecure</ipgapi:ApprovalCode>
            <ipgapi:Brand>MASTERCARD</ipgapi:Brand>
            <ipgapi:CommercialServiceProvider>IMS</ipgapi:CommercialServiceProvider>
            <ipgapi:OrderId>A-3849dd62-4b90-4c6d-b044-52f194a6b38a/ipgapi:OrderId>
            <ipgapi:IpgTransactionId>84597728301</ipgapi:IpgTransactionId>
            <ipgapi:PaymentType>CREDITCARD</ipgapi:PaymentType>
            <ipgapi:TDate>1652579035</ipgapi:TDate>
            <ipgapi:TDateFormatted>2022.05.15 03:43:55 (CEST)</ipgapi:TDateFormatted>
            <ipgapi:TransactionTime>1652579035</ipgapi:TransactionTime>
            <ipgapi:Secure3DResponse>
                <v1:Secure3DVerificationResponse>
                    <v1:VerificationRedirectResponse>
                        <v1:AcsURL>https://3ds-
acs.test.modirum.com/mdpayacs/pareq?token=192084631.1652579035.Z4-
DW8LMxqiiNfGKq05Lp5Os1RPG5R4WCSeqmI1tIYM</v1:AcsURL>
                        <v1:PaReq>eJxVUstywjAM/BWGe+LYcTKYEZ6hcIB2oLwO9GgctaSUBBwH6N/XDtBSXayV5LW0Mqy2BnG4
RF0b
```

```
</v1:PaReq>
                        <v1:MD>MD</v1:MD>
                        <v1:TermUrl>https://test.ipg-
online.com/connect/gateway/processing?execution=e1s1& </v1:TermUrl>
                    </v1:VerificationRedirectResponse>
                </v1:Secure3DVerificationResponse>
            </ipgapi:Secure3DResponse>
        </ipgapi:IPGApiOrderResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
        <ns4:IPGApiOrderRequest
xmlns:ns4="http://ipg-online.com/ipgapi/schemas/ipgapi" xmlns:ns2="http://ipg-
online.com/ipgapi/schemas/v1"
xmlns:ns3="http://ipg-online.com/ipgapi/schemas/a1">
            <ns2:Transaction>
                <ns2:CreditCardTxType>
                    <ns2:StoreId>330995118</ns2:StoreId>
                    <ns2:Type>sale</ns2:Type>
                </ns2:CreditCardTxType>
                <ns2:CreditCard3DSecure>
                    <ns2:Secure3DRequest>
                        <ns2:Secure3DAuthenticationRequest>
                            <ns2:AcsResponse>
                                <ns2:MD>MD
                                                  </ns2:MD>
                                <ns2:PaRes>eJzVWdmSrDiS/ZWymsew2+xE0JaVZuw7BHvAG/ +9wQSHvjAoeZpvNCCQ+
</ns2:PaRes>
                            </ns2:AcsResponse>
                        </ns2:Secure3DAuthenticationRequest>
                    </ns2:Secure3DRequest>
                </ns2:CreditCard3DSecure>
                <ns2:Payment>
                    <ns2:ChargeTotal>13.99</ns2:ChargeTotal>
                    <ns2:Currency>356</ns2:Currency>
                </ns2:Payment>
                <ns2:TransactionDetails>
                    <ns2:IpgTransactionId>84597728301/ns2:IpgTransactionId>
                </ns2:TransactionDetails>
            </ns2:Transaction>
        </ns4:IPGApiOrderRequest>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
        <ipgapi:IPGApiOrderResponse xmlns:a1="http://ipg-</pre>
online.com/ipgapi/schemas/a1" xmlns:ipgapi="http://ipg-
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
            <ipgapi:ApprovalCode>Y:010461:4597728301:PPX :051501361636/ipgapi:ApprovalCode>
            <ipgapi:AVSResponse>PPX</ipgapi:AVSResponse>
```

```
<ipgapi:Brand>MASTERCARD</ipgapi:Brand>
            <ipgapi:CommercialServiceProvider>IMS</ipgapi:CommercialServiceProvider>
            <ipgapi:OrderId>A-3849dd62-4b90-4c6d-b044-52f194a6b38a/ipgapi:OrderId>
            <ipgapi:IpgTransactionId>84597728301</ipgapi:IpgTransactionId>
            <ipgapi:PaymentType>CREDITCARD</ipgapi:PaymentType>
            <ipgapi:ProcessorApprovalCode>010461</ipgapi:ProcessorApprovalCode>
            <ipgapi:ProcessorReferenceNumber>051501361636</ipgapi:ProcessorReferenceNumber>
            <ipgapi:ProcessorResponseCode>00</ipgapi:ProcessorResponseCode>
            <ipgapi:ProcessorResponseMessage>Function performed error-
free</ipgapi:ProcessorResponseMessage>
            <ipgapi:SchemeTransactionId>MCC011DBW0515</ipgapi:SchemeTransactionId>
            <ipgapi:TDate>1652579035</ipgapi:TDate>
            <ipgapi:TDateFormatted>2022.05.15 03:43:55 (CEST)</ipgapi:TDateFormatted>
            <ipgapi:TerminalID>00001115</ipgapi:TerminalID>
            <ipgapi:TransactionResult>APPROVED</ipgapi:TransactionResult>
            <ipgapi:TransactionTime>1652579035</ipgapi:TransactionTime>
            <ipgapi:HostedData>
           <ipgapi:HostedDataID>DB98B26D-9F2F-4A51-AD9F-88BF741A333C</ipgapi:HostedDataID>
            </ipgapi:HostedData>
            <ipgapi:Secure3DResponse>
                <v1:ResponseCode3dSecure>1</v1:ResponseCode3dSecure>
            </ipgapi:Secure3DResponse>
            <ipgapi:IssuerReferenceNumber>051501361636</ipgapi:IssuerReferenceNumber>
        </ipgapi:IPGApiOrderResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

REST API

You can also use REST API request to store Token Information when performing a transaction. The complete process how to perform 3-D Secure via REST API is described on our online portal:

https://docs.firstdata.com/org/gateway/node/1682

POST /v2/services/payments/

```
"requestType": "PaymentCardSaleTransaction",
"storeId": "330995118",
"transactionAmount": {
    "total": "19.50",
    "currency": "INR"
},
"paymentMethod": {
    "paymentCard": {
        "number": "520473*****3014",
        "securityCode": "XXX",
        "expiryDate": {
            "month": "12",
            "year": "24"
        }
},
```

```
"authenticationRequest": {
        "authenticationType": "Secure3DAuthenticationRequest",
        "termURL": "https://test.ipg-online.com/webshop/simulator/secure3d/return",
        "methodNotificationURL": "https://test3.test/notify",
        "challengeIndicator": "01",
        "challengeWindowSize": "01"
    },
    "createToken": {
        "reusable": true,
        "declineDuplicates": false
    }
}
// "messageCategory": "01"
    "clientRequestId": "2838649",
    "apiTraceId": "YoDd3LYf-wEelRTAsCTxEwAAAbQ",
    "ipgTransactionId": "84597739746",
    "orderId": "R-7e170cfc-0050-43b2-9d78-bd06f3d25de2",
    "transactionType": "SALE",
    "paymentToken": {
        "reusable": true,
        "declineDuplicates": false,
        "brand": "MASTERCARD",
        "type": "PAYMENT_CARD"
    },
    "transactionOrigin": "ECOM",
    "paymentMethodDetails": {
        "paymentCard": {
            "expiryDate": {
                "month": "12",
                "year": "2024"
            "bin": "520473",
            "last4": "3014",
            "brand": "MASTERCARD"
        },
        "paymentMethodType": "PAYMENT_CARD"
    "transactionTime": 1652612572,
    "transactionStatus": "WAITING",
    "approvalCode": "?:waiting 3dsecure",
    "authenticationResponse": {
        "type": "3D_SECURE",
        "version": "1.0",
            "payerAuthenticationRequest": "eJxVUttuwjAM/ ",
            "termURL": "https://test.ipg-online.com/webshop/simulator/secure3d/return",
            "merchantData": "MD_
            "acsURL": "https://3ds-acs.test.modirum.com/mdpayacs/pareq?token=192101611.1652612572.DKZci1j-
kdhzAinuN0Jt4S6znmuL4kmW_CYXOasnKf8"
        }
    }
}
```

PATCH /v2/services/payments/{transaction-id}

PATCH https://test.ipg-online.com/ipgrestapi/v2/services/payments/84597739104 "authenticationType": "Secure3D10AuthenticationUpdateRequest", "storeId": "330995118", "payerAuthenticationResponse": "eJzVWdeO7DiS/+esuRSxW17c+ouz/h3MA7/fPQA/7yN+v6n4vEX9vOL9uPj749XvfwO4mv tV", "merchantData": "MD " } { "clientRequestId": "2838649", "apiTraceId": "YoDejyotJymN7oDLGj2jpgAAAGA", "ipgTransactionId": "84597739746", "orderId": "R-7e170cfc-0050-43b2-9d78-bd06f3d25de2", "transactionType": "SALE", "paymentToken": { "value": "447D180F-BFC5-4625-93AA-BB0D3589AB3A", "reusable": true, "declineDuplicates": false, "brand": "MASTERCARD", "type": "PAYMENT_CARD" }, "transactionOrigin": "ECOM", "paymentMethodDetails": { "paymentCard": { "expiryDate": { "month": "12", "year": "2024" }, "bin": "520473", "last4": "3014", "brand": "MASTERCARD" "paymentMethodType": "PAYMENT_CARD" }, "terminalId": "00001115", "merchantId": "470000032001125", "transactionTime": 1652612572, "approvedAmount": { "total": 19.5, "currency": "INR", "components": { "subtotal": 19.5 } }, "transactionStatus": "APPROVED", "approvalCode": "Y:010491:4597739746:PPX :051511362888", "secure3dResponse": { "responseCode3dSecure": "1" }, "schemeTransactionId": "MCC011DS70515", "processor": { "referenceNumber": "051511362888", "authorizationCode": "010491", "responseCode": "00",

```
"responseMessage": "Function performed error-free",
    "avsResponse": {
        "streetMatch": "NO_INPUT_DATA",
        "postalCodeMatch": "NO_INPUT_DATA"
    }
}
```

3DS Sale with Failure in provisioning of Network Token

In case of any error while provisioning the token for a given card number, gateway will send the provisioning error details as highlighted below, please note that this transaction has been authorized, only provisioning of network token for the given card number has failed.

SOAP API

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
        <ns4:IPGApiOrderRequest xmlns:ns4="http://ipg-</pre>
online.com/ipgapi/schemas/ipgapi" xmlns:ns2="http://ipg-
online.com/ipgapi/schemas/v1" xmlns:ns3="http://ipg-online.com/ipgapi/schemas/a1">
            <ns2:Transaction>
                <ns2:CreditCardTxType>
                    <ns2:StoreId>330995118</ns2:StoreId>
                    <ns2:Type>sale</ns2:Type>
                </ns2:CreditCardTxType>
                <ns2:CreditCardData>
                    <ns2:CardNumber>542606*****4979/ns2:CardNumber>
                    <ns2:ExpMonth>12</ns2:ExpMonth>
                    <ns2:ExpYear>22</ns2:ExpYear>
                    <ns2:CardCodeValue>014</ns2:CardCodeValue>
                </ns2:CreditCardData>
                <ns2:CreditCard3DSecure>
                    <ns2:AuthenticateTransaction>true</ns2:AuthenticateTransaction>
                </ns2:CreditCard3DSecure>
                <ns2:Payment>
                    <ns2:ChargeTotal>13.99</ns2:ChargeTotal>
                    <ns2:Currency>356</ns2:Currency>
                    <ns2:AssignToken>true</ns2:AssignToken>
                </ns2:Payment>
            </ns2:Transaction>
        </ns4:IPGApiOrderRequest>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
```

```
<ipgapi:IPGApiOrderResponse xmlns:a1="http://ipg-</pre>
online.com/ipgapi/schemas/a1" xmlns:ipgapi="http://ipg-
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
                                  <ipgapi:ApprovalCode>?:waiting 3dsecure</ipgapi:ApprovalCode>
                                  <ipgapi:Brand>MASTERCARD</ipgapi:Brand>
                                  <ipgapi:Country>DEU</ipgapi:Country>
                                  <ipgapi:CommercialServiceProvider>IMS</ipgapi:CommercialServiceProvider>
                                  <ipgapi:OrderId>A-461d05d2-e5eb-429c-a298-2afae6ab0245</ipgapi:OrderId>
                                  <ipgapi:IpgTransactionId>84597728640</ipgapi:IpgTransactionId>
                                  <ipgapi:PaymentType>CREDITCARD</ipgapi:PaymentType>
                                  <ipgapi:TDate>1652579356</ipgapi:TDate>
                                  <ipgapi:TDateFormatted>2022.05.15 03:49:16 (CEST)</ipgapi:TDateFormatted>
                                  <ipgapi:TransactionTime>1652579356</ipgapi:TransactionTime>
                                  <ipgapi:Secure3DResponse>
                                             <v1:Secure3DVerificationResponse>
                                                         <v1:VerificationRedirectResponse>
                                                                    <v1:AcsURL>https://3ds-
acs.test.modirum.com/mdpayacs/pareq?token=192085491.1652579356.V7 Gz LHICoZHgBllz 5oQeEf4t8TkmeXjkBM8kj4MWUncartest. The statement of the st
</v1:AcsURL>
                                                                    <v1:PaReq>eJxVUsFv1:PaReq>
                                                                    <v1:MD>MD</v1:MD>
                                                                    <v1:TermUrl>https://test.ipg-
on line.com/connect/gateway/processing? execution = e1s1\& amp; \_eventId = from modirum \& amp; acsReturn = true \& amp; resum from the connect/gateway/processing? execution = e1s1\& amp; \_eventId = from modirum \& amp; acsReturn = true \& amp; resum from the connect/gateway/processing? execution = e1s1\& amp; \_eventId = from modirum \& amp; acsReturn = true \& amp; acsR
eTransaction=true&referencedTransactionId=84597728640</v1:TermUrl>
                                                         </v1:VerificationRedirectResponse>
                                             </v1:Secure3DVerificationResponse>
                                  </ipgapi:Secure3DResponse>
                       </ipgapi:IPGApiOrderResponse>
           </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
           <SOAP-ENV:Header/>
           <SOAP-ENV:Body>
                       <ns4:IPGApiOrderRequest
xmlns:ns4="http://ipg-online.com/ipgapi/schemas/ipgapi" xmlns:ns2="http://ipg-
online.com/ipgapi/schemas/v1"
xmlns:ns3="http://ipg-online.com/ipgapi/schemas/a1">
                                  <ns2:Transaction>
                                             <ns2:CreditCardTxType>
                                                         <ns2:StoreId>330995118</ns2:StoreId>
                                                         <ns2:Type>sale</ns2:Type>
                                             </ns2:CreditCardTxType>
                                             <ns2:CreditCard3DSecure>
                                                         <ns2:Secure3DRequest>
                                                                    <ns2:Secure3DAuthenticationRequest>
                                                                                <ns2:AcsResponse>
                                                                                          <ns2:MD>MD6a</ns2:MD>
                                                                                           <ns2:PaRes>++</ns2:PaRes>
                                                                               </ns2:AcsResponse>
                                                                    </ns2:Secure3DAuthenticationRequest>
                                                         </ns2:Secure3DRequest>
                                             </ns2:CreditCard3DSecure>
                                             <ns2:Pavment>
                                                         <ns2:ChargeTotal>13.99</ns2:ChargeTotal>
                                                        <ns2:Currency>356</ns2:Currency>
```

```
</ns2:Payment>
                <ns2:TransactionDetails>
                    <ns2:IpgTransactionId>84597728640</ns2:IpgTransactionId>
                </ns2:TransactionDetails>
            </ns2:Transaction>
        </ns4:IPGApiOrderRequest>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
        <ipgapi:IPGApiOrderResponse xmlns:a1="http://ipg-</pre>
online.com/ipgapi/schemas/a1" xmlns:ipgapi="http://ipg-
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
            <ipgapi:ApprovalCode>Y:010462:4597728640:PPX :051501361736/ipgapi:ApprovalCode>
            <ipgapi:AVSResponse>PPX</ipgapi:AVSResponse>
            <ipgapi:Brand>MASTERCARD</ipgapi:Brand>
            <ipgapi:Country>DEU</ipgapi:Country>
            <ipgapi:CommercialServiceProvider>IMS</ipgapi:CommercialServiceProvider>
            <ipgapi:OrderId>A-461d05d2-e5eb-429c-a298-2afae6ab0245/ipgapi:OrderId>
            <ipgapi:IpgTransactionId>84597728640</ipgapi:IpgTransactionId>
            <ipgapi:PaymentType>CREDITCARD</ipgapi:PaymentType>
            <ipgapi:ProcessorApprovalCode>010462</ipgapi:ProcessorApprovalCode>
            <ipgapi:ProcessorReferenceNumber>051501361736</ipgapi:ProcessorReferenceNumber>
            <ipgapi:ProcessorResponseCode>00</ipgapi:ProcessorResponseCode>
            <ipgapi:ProcessorResponseMessage>Function performed error-
free</ipgapi:ProcessorResponseMessage>
            <ipgapi:SchemeTransactionId>MCC011DC40515</ipgapi:SchemeTransactionId>
            <ipgapi:TDate>1652579356</ipgapi:TDate>
            <ipgapi:TDateFormatted>2022.05.15 03:49:16 (CEST)</ipgapi:TDateFormatted>
            <ipgapi:TerminalID>00001115</ipgapi:TerminalID>
            <ipgapi:TransactionResult>APPROVED</ipgapi:TransactionResult>
            <ipgapi:TransactionTime>1652579356</ipgapi:TransactionTime>
            <ipgapi:HostedData>
            <a1:Error Code="NT-03">
                   <a1:ErrorMessage>Processing error while provisioning network token</a1:ErrorMessage>
              </a1:Error>
           </ipgapi:HostedData>
            <ipgapi:Secure3DResponse>
                <v1:ResponseCode3dSecure>1</v1:ResponseCode3dSecure>
            </ipgapi:Secure3DResponse>
            <ipgapi:IssuerReferenceNumber>051501361736</ipgapi:IssuerReferenceNumber>
        </ipgapi:IPGApiOrderResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

REST API

You can also use REST API request to store Token Information when performing a transaction. The complete process how to perform 3-D Secure via REST API is described on our online portal:

https://docs.firstdata.com/org/gateway/node/1682

POST /v2/services/payments/

```
"requestType": "PaymentCardSaleTransaction",
    "storeId": "330995118",
    "transactionAmount": {
        "total": "19.50",
        "currency": "INR"
    "paymentMethod": {
        "paymentCard": {
            "number": "542606*****4979",
            "securityCode": "XXX",
            "expiryDate": {
                "month": "12",
                "year": "24"
        }
    },
    "authenticationRequest": {
        "authenticationType": "Secure3D10AuthenticationRequest"
    },
    "createToken": {
        "reusable": true,
        "declineDuplicates": false
    }
}
// "messageCategory": "01"
    "clientRequestId": "2838649",
    "apiTraceId": "YoDgHo5Dv8ThoMHn@9G01AAAAD0",
    "ipgTransactionId": "84597739882",
    "orderId": "R-543b47f2-bcd4-42ed-b9b2-8a7d508aac72",
    "transactionType": "SALE",
    "paymentToken": {
        "reusable": true,
        "declineDuplicates": false,
        "brand": "MASTERCARD",
        "type": "PAYMENT_CARD"
    "transactionOrigin": "ECOM",
    "paymentMethodDetails": {
        "paymentCard": {
            "expiryDate": {
                "month": "12",
                "year": "2024"
            },
            "bin": "542606",
            "last4": "4979",
            "brand": "MASTERCARD"
        },
        "paymentMethodType": "PAYMENT_CARD"
    },
    "country": "Germany",
    "transactionTime": 1652613150,
    "transactionStatus": "WAITING",
    "approvalCode": "?:waiting 3dsecure",
```

```
"authenticationResponse": {
        "type": "3D_SECURE",
        "version": "1.0",
        "params": {
            "payerAuthenticationRequest": "eJxVUk1zgjAQ/SuOdwiJoOKsmbHVTp1WBz8OvYawrYwFNIRi++ubIFS71+x7u9n
svg3sDwpxvkNZKeSwwrIUH9hLk2k/2m62TuAPYn/ ",
            "termURL": "https://test.ipg-
online.com/connect/gateway/processing?execution=e1s1&_eventId=frommodirum&acsReturn=true&resumeTransaction
=true&referencedTransactionId=84597739882",
            "merchantData": "MD
                                         1950202205151112302356mzQPKXNEuDuEd7/FIEari/L86pQ=
                          _R-543b47f2-bcd4-42ed-
b9b20ww
                                                                                                 return-
url?
                                                                                            _VRQR-543b47f2-
bcd4-42ed-b9b2-8a7d508aac72243992",
            "acsURL": "https://3ds-
acs.test.modirum.com/mdpayacs/pareq?token=192101691.1652613150.FBTy1idMLlGsWPuILGTVvINGy3obUlJOlsFp0RWe6tM
    }
```

PATCH /v2/services/payments/{transaction-id}

```
PATCH https://test.ipg-online.com/ipgrestapi/v2/services/payments/84597739104
    "authenticationType": "Secure3D10AuthenticationUpdateRequest",
    "storeId": "330995118",
    payerAuthenticationResponse": "eJzVWdmSrDiS/ZWymkfsNjsRtGWlGTsEW7BGwBv7vkOwfP2QmffeWqzapnsexmx4Qbgklw"
uX+zmS3ux8TBLWSqJlTN7f1GSagiz5pYh/+/VuGuY3HEND7JIi38Ioxr5hSBJ/C8kQ+XYNLjEOXYMguiC/vr/dKTOZPns1CAGjCIodwlcy
TkXXvsP/gP6BvIE/Ps9BxigP2vn9LYgGWtLe4c/nDfz++dYko8S+kyR0Ptgb+PX5Bv7e77581KbT4K2I35vDuMtPjVvYhYsvIC9xwViAyp
Xojd/ewI8Wb3EwJ+8IhCAQDuO/wPA/YeSfKPQGfsrf+g91VNMtp26YxE/5HyVv568Zkzba31GceAN/fr01W9+1ydninNzP8hv4u3F90L5D
f3gw8kKeuk/pm/18f5uL5i9GYf+E0TfwU/42zcG8T0/eG/i99BYFr9d7qaYqGQoEmT9Nhub41F0vVC9R53NO9rPJWxIV79CHUef7sxdVZ9
1YzHnzjn61+V3wBn6YAn468P3NKrL2HGxMftmaup1++zWf5/6fILiu6z9W9B/dmIHIOREQIsGzQTwV2X/9+tUriaU27d7fmKDt2iIK6uII
5tPdajLnXfzLzwH/TqVtfmiFQZNjvp1qv0Uw1n77kEAojJ/6wb9X+gdz/51R/mr4OAXfpjyAPwb4i6L3NzNJkw83J784pvTbr//1h2XNFl
kyzf+bEX+M9kcNP/S5Qb0k79NdV/uyQS254QNfKYeY2p6UVb/k7Lcf/b5avoE/Tfxu/w8P/ ",
    "merchantData": "MD
                                 1950202205151112302356mzQPKXNEuDuEd7/FIEari/L86pQ=___
                  R-543b47f2-bcd4-42ed-
     9900004
b9b20ww
                                                                                                 return-
url?
                                                                                            VRQR-543b47f2-
bcd4-42ed-b9b2-8a7d508aac72243992"
}
{
    "clientRequestId": "2838649",
    "apiTraceId": "YoDgxI7dRsyaDCavkKMnngAAAXs",
    "ipgTransactionId": "84597739882",
    "orderId": "R-543b47f2-bcd4-42ed-b9b2-8a7d508aac72",
    "transactionType": "SALE",
    "paymentToken": {
        "reusable": true,
        "declineDuplicates": false,
        "brand": "MASTERCARD",
        "type": "PAYMENT_CARD",
        "error": {
            "message": "Processing error while provisioning network token"
    },
```

```
"transactionOrigin": "ECOM",
    "paymentMethodDetails": {
        "paymentCard": {
            "expiryDate": {
                "month": "12",
                "year": "2024"
            },
            "bin": "542606",
            "last4": "4979",
            "brand": "MASTERCARD"
        "paymentMethodType": "PAYMENT_CARD"
    },
    "country": "Germany",
    "terminalId": "00001115",
    "merchantId": "470000032001125",
    "transactionTime": 1652613150,
    "approvedAmount": {
        "total": 19.5,
        "currency": "INR",
        "components": {
            "subtotal": 19.5
    },
    "transactionStatus": "APPROVED",
    "approvalCode": "Y:010492:4597739882:PPX :051511362894",
    "secure3dResponse": {
        "responseCode3dSecure": "1"
    },
    \verb"schemeTransactionId": \verb"MCC011DSI0515",\\
    "processor": {
        "referenceNumber": "051511362894",
        "authorizationCode": "010492",
        "responseCode": "00",
        "responseMessage": "Function performed error-free",
        "avsResponse": {
            "streetMatch": "NO_INPUT_DATA",
            "postalCodeMatch": "NO_INPUT_DATA"
        }
   }
}
```

HostedDataProcessingError in Connect / Hosted Payment Pages

Transaction response

Among all the details sent back to the defined response URLs as the <u>transaction result</u>, in case of any failure in provisioning the network token, you might especially consider hostedDataProcessingError.

hostedDataProcessin gError	Reason the provisioning of network token failed possible values		
genor	New /		
	Modifi		
	ed		
	Error	Error	
	Code	Code	Error Message Approval Code Message
		NT-	
	NT-01	0000001	Merchant not setup for Network Token
		NT-	
	NT-02	0000002	Configuration missing for fiservTokenRequestorId
		NT-	
	NT-03	0000003	Processing error while provisioning network token
		NT-	
	NT-04	0000004	Network token provisioning error
		NT-	
	NT-05	0000005	Network token not supported for the merchant
		NT-	
	NT-06	0000006	Network cryptogram provisioning error
		NT-	Network token provisioning not supported for this
	NT-07	0000007	transaction
		NT-	
	NT-08	0000008	Network tokenid is missing, cannot provision cryptogram
		NT-	
	NT-09	0000009	Unable to update provision status for HostedDataID

Your Transaction finished successfully

Here are the confirmation fields:

txndate_processed	15/05/22 13:44:57	
ccbin	542606	
timezone	Asia/Calcutta	
oid	C-b036bcbe-fd73-42e7-885f-bd19d986543e	
cccountry	DEU	
expmonth	12	
endpointTransactionId	051511363088	
currency	358	
processor_response_code	00	
chargetotal	13.99	
terminal_id	00001115	
approval_code	Y:010497:4597738808:PPX :051511363088	
hiddenSharedsecret	sharedsecret	
hiddenTxndatetime	2022:05:15-17:14:13	
expyear	2025	
response_hash	ee04f6e01009f5e246bf76660713073208a3decb	
hiddenStorename	330995118	
transactionNotificationURL	https://test.ipg-online.com/webshop/transactionNo	
ignore_deploymentType	JBoss	
schemeTransactionId	MCC011DTG0515	
tdate	1652615097	
installments_interest	false	
ignore_refreshTime	on	
bname	TEST	
ccbrand	MASTERCARD	
refnumber		
remanioer	051511363088	
txntype	051511363088 sale	
txntype	sale	
txntype paymentMethod	sale M	
txntype paymentMethod txndatetime	Sale M 2022:05:15-17:14:13	
txntype paymentMethod txndatetime cardnumber	Sale M 2022:05:15-17:14:13 (MASTERCARD) 4979	
txntype paymentMethod txndatetime cardnumber hostedDataProcessingError	Sale M	
txntype paymentMethod txndatetime cardnumber hostedDataProcessingError ipgTransactionId	Sale M	

add a new command to the AsynchronousHTTPCall thread pool, httpCallid=01964682-632c-4cf6-baf8-0 62196add618, orderId=C-b036bcbe-fd73-42e7-885f-bd19d986543e, url=https://test.ipg-online.com/webshop/transactionNotification, parameters=txndate_processed=15%2F05%2F22+13%3A44%3A57&ccbin=542 606&timezone=Asia%2FCalcutta&oid=C-b036bcbe-fd73-42e7-885f-bd19d986543e&cccountry=DEU&expmonth= 12&endpointTransactionId=051511363088¤cy=356&processor_response_code=00&chargetotal=13.99 &terminal_id=00001115&approval_code=Y%3A010497%3A4597738808%3APPX+%3A051511363088&hiddenShareds

ecret=sharedsecret&hiddenTxndatetime=2022%3A05%3A15-17%3A14%3A13&expyear=2025¬ification_hash =daa10600821fb8d289b8c6fd960bd6cf6e951373&hiddenStorename=330995118&transactionNotificationURL= https%3A%2F%2Ftest.ipg-online.com%2Fwebshop%2FtransactionNotification&ignore_deploymentType=JBo ss&schemeTransactionId=MCC011DTG0515&tdate=1652615097&installments_interest=false&ignore_refres hTime=on&bname=TEST&ccbrand=MASTERCARD&refnumber=051511363088&txntype=sale&paymentMethod=M&txnd atetime=2022%3A05%3A15-17%3A14%3A13&cardnumber=%28MASTERCARD%29+...+4979&hostedDataProcessingError=NT-03%3A+Processing+error+while+provisioning+network+token&ipgTransactionId=84597738808&status=APPROVED

Initiate payment transactions using HostedDataID Linked to Network Token

With generated 'HostedDataID' you can perform transactions without the need to pass the credit card again.

Please note, that it is not allowed to store the card code (in most cases on the back of the card) so that for credit card transactions, the cardholder still needs to enter this value.

Payment Gateway identifies the incoming Hosteddata is linked to network Token, and generate cryptogram (as required), and pass token and cryptogram during authorization.

Sale with Hosteddata Linked to Network Token

SOAP API

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ipg="http://ipg-</pre>
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-
online.com/ipgapi/schemas/v1" xmlns:pay="http://api.clickandbuy.com/webservices/pay_1_0_0/">
    <soapenv:Header/>
    <soapenv:Body>
        <ipg:IPGApiOrderRequest>
            <v1:Transaction>
                <v1:CreditCardTxType>
                    <v1:StoreId330995118</v1:StoreId>
                    <v1:Type>sale</v1:Type>
                </v1:CreditCardTxType>
                <v1:Payment>
                    <v1:HostedDataID>9B2E907A-C8C5-4402-8157-0F243A789579</v1:HostedDataID>
                    <v1:ChargeTotal>15</v1:ChargeTotal>
                    <v1:Currency>INR</v1:Currency>
                </v1:Payment>
            </v1:Transaction>
        </ipg:IPGApiOrderRequest>
    </soapenv:Body>
</soapenv:Envelope>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Body>
        <ipgapi:IPGApiOrderResponse xmlns:a1="http://ipg-</pre>
online.com/ipgapi/schemas/a1" xmlns:ipgapi="http://ipg-
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
            <ipgapi:ApprovalCode>Y:135532:4597792985:PPX :213615367448/ipgapi:ApprovalCode>
            <ipgapi:AVSResponse>PPX</ipgapi:AVSResponse>
            <ipgapi:Brand>VISA</ipgapi:Brand>
            <ipgapi:CommercialServiceProvider>IMS</ipgapi:CommercialServiceProvider>
            <ipgapi:OrderId>A-c522b47e-0de4-4223-aa63-d63d0855bea4</ipgapi:OrderId>
            <ipgapi:IpgTransactionId>84597792985</ipgapi:IpgTransactionId>
            <ipgapi:PaymentType>CREDITCARD</ipgapi:PaymentType>
            <ipgapi:ProcessorApprovalCode>135532</ipgapi:ProcessorApprovalCode>
```

```
<ipgapi:ProcessorReferenceNumber>213615367448</ipgapi:ProcessorReferenceNumber>
            <ipgapi:ProcessorResponseCode>00</ipgapi:ProcessorResponseCode>
            <ipgapi:ProcessorResponseMessage>Function performed error-
free</ipgapi:ProcessorResponseMessage>
            <ipgapi:TDate>1652713403</ipgapi:TDate>
            <ipgapi:TDateFormatted>2022.05.16 17:03:23 (CEST)</ipgapi:TDateFormatted>
            <ipgapi:TerminalID>00001115</ipgapi:TerminalID>
            <ipgapi:TransactionResult>APPROVED</ipgapi:TransactionResult>
            <ipgapi:TransactionTime>1652713403</ipgapi:TransactionTime>
            <ipgapi:IssuerReferenceNumber>213615000257</ipgapi:IssuerReferenceNumber>
        </ipgapi:IPGApiOrderResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
REST API
    "requestType": "PaymentTokenSaleTransaction",
    "storeId": "330995118",
    "transactionAmount": {
        "total": "19.50",
        "currency": "INR"
    },
    "paymentMethod": {
        "paymentToken": {
            "value": "9B2E907A-C8C5-4402-8157-0F243A789579",
            "securityCode": "XXX"
    }
}
    "clientRequestId": "2838649",
    "apiTraceId": "YoJ0ZeGKgFJi9R5HeOK6wgAAA9s",
    "ipgTransactionId": "84597800848",
    "orderId": "R-57176dbe-b6bc-428a-ab44-69e408c52e98",
    "transactionType": "SALE",
    "paymentToken": {
        "reusable": true,
        "declineDuplicates": false,
        "brand": "VISA",
        "type": "PAYMENT_CARD"
    "transactionOrigin": "ECOM",
    "paymentMethodDetails": {
        "paymentCard": {
            "expiryDate": {
                "month": "12",
                "year": "2022"
            "bin": "489537",
            "last4": "1214",
            "brand": "VISA"
        "paymentMethodType": "PAYMENT CARD"
```

```
},
    "terminalId": "00001115",
    "merchantId": "470000032001125",
    "transactionTime": 1652716645,
    "approvedAmount": {
        "total": 19.50,
        "currency": "INR",
        "components": {
            "subtotal": 19.50
    },
    "transactionStatus": "APPROVED",
    "approvalCode": "Y:199619:4597800848:PPX :213615367542",
    "processor": {
        "referenceNumber": "213615367542",
        "authorizationCode": "199619",
        "responseCode": "00",
        "responseMessage": "Function performed error-free",
        "avsResponse": {
            "streetMatch": "NO_INPUT_DATA",
            "postalCodeMatch": "NO_INPUT_DATA"
        }
    }
}
```

3DS Sale with Hosteddata Linked to Network Token

SOAP API

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ipg="http://ipg-</pre>
online.com/ipgapi/schemas/ipgapi" xmlns:pay="http://api.clickandbuy.com/webservices/pay_1_0_0/" xmlns:v1="
http://ipg-online.com/ipgapi/schemas/v1">
    <soapenv:Header/>
    <soapenv:Body>
        <ipg:IPGApiOrderRequest>
            <v1:Transaction>
                <v1:CreditCardTxType>
                    <v1:StoreId>330995118</v1:StoreId>
                    <v1:Type>sale</v1:Type>
                </v1:CreditCardTxType>
                <v1:CreditCard3DSecure>
                    <v1:AuthenticateTransaction>true</v1:AuthenticateTransaction>
                </v1:CreditCard3DSecure>
                <v1:Payment>
                    <v1:HostedDataID>9B2E907A-C8C5-4402-8157-0F243A789579</v1:HostedDataID>
                    <v1:ChargeTotal>15</v1:ChargeTotal>
                    <v1:Currency>INR</v1:Currency>
                </v1:Payment>
            </v1:Transaction>
```

```
</ipg:IPGApiOrderRequest>
        </soapenv:Body>
</soapenv:Envelope>
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
        <SOAP-ENV:Header/>
        <SOAP-ENV:Body>
               <ipgapi:IPGApiOrderResponse xmlns:a1="http://ipg-</pre>
online.com/ipgapi/schemas/a1" xmlns:ipgapi="http://ipg-
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
                       <ipgapi:ApprovalCode>?:waiting 3dsecure</ipgapi:ApprovalCode>
                       <ipgapi:Brand>VISA</ipgapi:Brand>
                       <ipgapi:CommercialServiceProvider>IMS</ipgapi:CommercialServiceProvider>
                       <ipgapi:OrderId>A-09c7f113-2d6b-45a8-ac43-cd4fe90db79c</ipgapi:OrderId>
                       <ipgapi:IpgTransactionId>84597764041</ipgapi:IpgTransactionId>
                       <ipgapi:PaymentType>CREDITCARD</ipgapi:PaymentType>
                       <ipgapi:TDate>1652692270</ipgapi:TDate>
                       <ipgapi:TDateFormatted>2022.05.16 11:11:10 (CEST)</ipgapi:TDateFormatted>
                       <ipgapi:TransactionTime>1652692270</ipgapi:TransactionTime>
                       <ipgapi:Secure3DResponse>
                               <v1:Secure3DVerificationResponse>
                                      <v1:VerificationRedirectResponse>
                                              <v1:AcsURL>https://3ds-
acs.test.modirum.com/mdpayacs/pareq?token=192181191.1652692270.HNuWcVM1lk08bj9iw4u8cjm8wGMSqPbp_IFF8j7xUNE
</v1:AcsURL>
                                              <v1:PaReq>eJxV</v1:PaReq>
                                              <v1:MD>MD__ </v1:MD>
                                              <v1:TermUrl>https://test.ipg-
on line.com/connect/gateway/processing? execution = e1s1\& amp; \_eventId = from modirum \& amp; acsReturn = true \& amp; resum from the connect/gateway are supported by the connect by the
eTransaction=true&referencedTransactionId=84597764041</v1:TermUrl>
                                      </v1:VerificationRedirectResponse>
                              </v1:Secure3DVerificationResponse>
                       </ipgapi:Secure3DResponse>
               </ipgapi:IPGApiOrderResponse>
        </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ipg="http://ipg-</pre>
online.com/ipgapi/schemas/ipgapi" xmlns:pay="http://api.clickandbuy.com/webservices/pay_1_0_0/" xmlns:v1="
http://ipg-online.com/ipgapi/schemas/v1">
        <soapenv:Header/>
        <soapenv:Body>
               <ipg:IPGApiOrderRequest>
                       <v1:Transaction>
                               <v1:CreditCardTxType>
                                      <v1:StoreId>330995118</v1:StoreId>
                                      <v1:Type>sale</v1:Type>
                               </v1:CreditCardTxType>
                               <v1:CreditCard3DSecure>
                                      <v1:Secure3DRequest>
                                              <v1:Secure3DAuthenticationRequest>
                                                      <v1:AcsResponse>
                                                             <v1:MD>MD </v1:MD>
                                                             <v1:PaRes>eJzlWNmO4</v1:PaRes>
```

```
</v1:AcsResponse>
                        </v1:Secure3DAuthenticationRequest>
                    </v1:Secure3DRequest>
                </v1:CreditCard3DSecure>
                <v1:Payment>
                    <v1:ChargeTotal>15</v1:ChargeTotal>
                    <v1:Currency>INR</v1:Currency>
                </v1:Payment>
                <v1:TransactionDetails>
                    <v1:IpgTransactionId>84597764041</v1:IpgTransactionId>
                </v1:TransactionDetails>
            </v1:Transaction>
        </ipg:IPGApiOrderRequest>
    </soapenv:Body>
</soapenv:Envelope>
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Header/>
    <SOAP-ENV:Bodv>
        <ipgapi:IPGApiOrderResponse xmlns:a1="http://ipg-</pre>
online.com/ipgapi/schemas/a1" xmlns:ipgapi="http://ipg-
online.com/ipgapi/schemas/ipgapi" xmlns:v1="http://ipg-online.com/ipgapi/schemas/v1">
            <ipgapi:ApprovalCode>Y:196622:4597764041:PPX :213609366390/ipgapi:ApprovalCode>
            <ipgapi:AVSResponse>PPX</ipgapi:AVSResponse>
            <ipgapi:Brand>VISA</ipgapi:Brand>
            <ipgapi:CommercialServiceProvider>IMS</ipgapi:CommercialServiceProvider>
            <ipgapi:OrderId>A-09c7f113-2d6b-45a8-ac43-cd4fe90db79c</ipgapi:OrderId>
            <ipgapi:IpgTransactionId>84597764041</ipgapi:IpgTransactionId>
            <ipgapi:PaymentType>CREDITCARD</ipgapi:PaymentType>
            <ipgapi:ProcessorApprovalCode>196622</ipgapi:ProcessorApprovalCode>
            <ipgapi:ProcessorReferenceNumber>213609366390</ipgapi:ProcessorReferenceNumber>
            <ipgapi:ProcessorResponseCode>00</ipgapi:ProcessorResponseCode>
            <ipgapi:ProcessorResponseMessage>Function performed error-
free</ipgapi:ProcessorResponseMessage>
            <ipgapi:TDate>1652692270</ipgapi:TDate>
            <ipgapi:TDateFormatted>2022.05.16 11:11:10 (CEST)</ipgapi:TDateFormatted>
            <ipgapi:TerminalID>00001115</ipgapi:TerminalID>
            <ipgapi:TransactionResult>APPROVED</ipgapi:TransactionResult>
            <ipgapi:TransactionTime>1652692270</ipgapi:TransactionTime>
            <ipgapi:Secure3DResponse>
                <v1:ResponseCode3dSecure>1</v1:ResponseCode3dSecure>
            </ipgapi:Secure3DResponse>
            <ipgapi:IssuerReferenceNumber>213609000030</ipgapi:IssuerReferenceNumber>
        </ipgapi:IPGApiOrderResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
REST API
    "requestType": "PaymentTokenSaleTransaction",
    "storeId": "330995118",
    "transactionAmount": {
```

```
"total": "19.50",
                    "currency": "INR"
          },
          "paymentMethod": {
                    "paymentToken": {
                              "value": "9B2E907A-C8C5-4402-8157-0F243A789579",
                              "securityCode": "XXX"
                   }
          },
          "authenticationRequest": {
                    "authenticationType": "Secure3D10AuthenticationRequest"
          }
          }
          "clientRequestId": "2838649",
          "apiTraceId": "YoI90UZn71igwDAejgXOGQAAAcQ",
          "ipgTransactionId": "84597772400",
          "orderId": "R-968d1f9b-5b03-4876-86ea-ec644fc860d5",
          "transactionType": "SALE",
          "paymentToken": {
                    "reusable": true,
                    "declineDuplicates": false,
                    "brand": "VISA",
                    "type": "PAYMENT_CARD"
          },
          "transactionOrigin": "ECOM",
          "paymentMethodDetails": {
                    "paymentCard": {
                              "expiryDate": {
                                        "month": "12",
                                        "year": "2022"
                              "bin": "489537",
                              "last4": "1214",
                              "brand": "VISA"
                   },
                    "paymentMethodType": "PAYMENT_CARD"
          },
          "transactionTime": 1652702673,
          "transactionStatus": "WAITING",
          "approvalCode": "?:waiting 3dsecure",
          "authenticationResponse": {
                   "type": "3D_SECURE",
                    "version": "1.0",
                    "params": {
                              "payerAuthenticationRequest": "eJxVUk1zgjAQ/SuMdwggIDhrZmw9iDM6fk079oZhLYwlaAjF//L/ELlTmx6A=="
                              "termURL": "https://test.ipg-
on line.com/connect/gateway/processing? execution = e1s1\&\_eventId = from modirum \& acsReturn = true \& resume Transaction = from the first of the f
=true&referencedTransactionId=84597772400",
                              "merchantData": "MD
                              "acsURL": "https://3ds-acs.test.modirum.com/mdpayacs/pareq?token=192215691.1652702673.-
I3YNVKwsaNu309pa-Rm8Af-dNnDXBvrHq6tGBNLLCw"
          }
```

```
}
    "authenticationType": "Secure3D10AuthenticationUpdateRequest",
    "storeId": "330995118",
    "payerAuthenticationResponse": " tg==",
    "merchantData": "MD_
                                 _1950202205161204332356ocZcnhWHI7mVnQHJY8eJq4cYI/4=____222222
                 R-968d1f9b-5b03-4876-
86ea0ww_
                                                                                                  return-
                                                                                             VRQR-968d1f9b-
url?
5b03-4876-86ea-ec644fc860d5118972"
}
    "clientRequestId": "2838649",
    "apiTraceId": "YoI@I47dRsyaDCavkKO8LwAAAXg",
    "ipgTransactionId": "84597772400",
    "orderId": "R-968d1f9b-5b03-4876-86ea-ec644fc860d5",
    "transactionType": "SALE",
    "paymentToken": {
        "reusable": true,
        "declineDuplicates": false,
        "brand": "VISA",
        "type": "PAYMENT CARD"
    },
    "transactionOrigin": "ECOM",
    "paymentMethodDetails": {
        "paymentCard": {
            "expiryDate": {
                "month": "12",
                "year": "2022"
            },
            "bin": "489537",
            "last4": "1214",
            "brand": "VISA"
        },
        "paymentMethodType": "PAYMENT_CARD"
    },
    "terminalId": "00001115",
    "merchantId": "470000032001125",
    "transactionTime": 1652702673,
    "approvedAmount": {
        "total": 19.5,
        "currency": "INR",
        "components": {
            "subtotal": 19.5
    },
    "transactionStatus": "APPROVED",
    "approvalCode": "Y:135479:4597772400:PPX :213612366718",
    "secure3dResponse": {
        "responseCode3dSecure": "1"
    "processor": {
        "referenceNumber": "213612366718",
```

```
"authorizationCode": "135479",
    "responseCode": "00",
    "responseMessage": "Function performed error-free",
    "avsResponse": {
        "streetMatch": "NO_INPUT_DATA",
        "postalCodeMatch": "NO_INPUT_DATA"
    }
}
```