REST API Flow

1. **Sale Transaction**

Please input the endpoint URL as follows: <https://cert.api.firstdata.com/gateway/v2/payments> and choose the method as POST.

* Below are the mandatory parameters to be utilized under the Header tab:
* Content-Type: application/json
* Client-Request-Id: {{ClientRequestId}}
* Api-Key: {{key}}
* Timestamp: {{time}}
* Message-Signature: {{signature}}
* Pre-request Script:-

**should be correctly used for their respective store ID or node ID.**

*var* key = 'vlIfV2UmjFokaikKK8z2PF0MQhxQfv9Z';

*var* secret = 't7Sc2lrP2LELLUzoezVDMh4DUI4PVeBGSGOpQ92LmGi';  //41583677648

*var* ClientRequestId = Math.floor((Math.random() \* 10000000)+1);

*var* time = new Date().getTime();

*var* method = request.method;

*var* requestBody = request.data;

*var* rawSignature = key + ClientRequestId + time + requestBody;

*var* computedHash = CryptoJS.algo.HMAC.create(CryptoJS.algo.SHA256, secret.toString());

computedHash.update(rawSignature);

computedHash = computedHash.finalize();

*var* computedHmac = CryptoJS.enc.Base64.stringify(computedHash);

postman.setEnvironmentVariable('key',key);

postman.setEnvironmentVariable('time',time);

postman.setEnvironmentVariable('signature',computedHmac);

postman.setEnvironmentVariable('ClientRequestId',ClientRequestId);

* **Note”- You should configure the same header and pre-request script for respective API call.**
* Below is request parameter for **Sale** transaction
* {
* "storeId": "3300001300",
* "requestType": "PaymentCardSaleTransaction",
* "transactionAmount": {
* "total": "1.00",
* "currency": "INR"
* },
* "paymentMethod": {
* "paymentCard": {
* "number": "4099000000001960",
* "securityCode": "123",
* "expiryDate": {
* "month": "02",
* "year": "25"
* }
* }
* },
* "authenticationRequest": {
* "authenticationType": "Secure3D21AuthenticationRequest",
* "termURL": "https://test.ipg-online.com/webshop/simulator/secure3d/return"
* },
* "order": {
* "orderId": "TestDemrot"
* }
* }
* Click on Send to run the request payload.
* In Bellow response you will get ipgTransactionId and iframe

{

    "type": "transactionResponse",

    "clientRequestId": "2920623",

    "apiTraceId": "Zh-b0m-Ort2vRR7N9nB\_9wAAA8Y",

    "ipgTransactionId": "84653932526",

    "orderId": "TestDemtot",

    "transactionType": "SALE",

    "paymentToken": {

        "reusable": true,

        "declineDuplicates": false,

        "brand": "VISA",

        "type": "PAYMENT\_CARD"

    },

    "transactionOrigin": "ECOM",

    "paymentMethodDetails": {

        "paymentCard": {

            "expiryDate": {

                "month": "02",

                "year": "2025"

            },

            "bin": "409900",

            "last4": "1960",

            "brand": "VISA"

        },

        "paymentMethodType": "PAYMENT\_CARD",

        "paymentMethodBrand": "VISA"

    },

    "country": "USA",

    "transactionTime": 1713347538,

    "transactionAmount": {

        "total": 1.00,

        "currency": "INR",

        "components": {

            "subtotal": 1.00

        }

    },

    "transactionStatus": "WAITING",

    "approvalCode": "?:waiting 3dsecureMethod",

    "authenticationResponse": {

        "type": "3D\_SECURE",

        "version": "2.2",

        "secure3dMethod": {

            "methodForm": "<iframe id=\"tdsMmethodTgtFrame\" name=\"tdsMmethodTgtFrame\" style=\"visibility: hidden; width: 1px; height: 1px;\" xmlns=\"http://www.w3.org/1999/xhtml\">    <!--.--></iframe><form id=\"tdsMmethodForm\" name=\"tdsMmethodForm\" action=\"https://3ds-acs.test.modirum.com/mdpayacs/3ds-method\" method=\"post\" target=\"tdsMmethodTgtFrame\" xmlns=\"http://www.w3.org/1999/xhtml\">    <input type=\"hidden\" name=\"3DSMethodData\" value=\"eyAidGhyZWVEU1NlcnZlclRyYW5zSUQiIDogImQzNDU2Nzk3LTMzZGEtNWE2Zi04MDAwLTAwMDAwMjlhMWZlZiIsICJ0aHJlZURTTWV0aG9kTm90aWZpY2F0aW9uVVJMIiA6ICJodHRwczovL3Rlc3QuaXBnLW9ubGluZS5jb20vaXBnY29uZmlybWF0aW9uL3NlcnZpY2VzL3NlY3VyZTNkcz9yZWZlcmVuY2VkVHJhbnNhY3Rpb25JZD04NDY1MzkzMjUyNiIgfQ\"/>    <input type=\"hidden\" name=\"threeDSMethodData\" value=\"eyAidGhyZWVEU1NlcnZlclRyYW5zSUQiIDogImQzNDU2Nzk3LTMzZGEtNWE2Zi04MDAwLTAwMDAwMjlhMWZlZiIsICJ0aHJlZURTTWV0aG9kTm90aWZpY2F0aW9uVVJMIiA6ICJodHRwczovL3Rlc3QuaXBnLW9ubGluZS5jb20vaXBnY29uZmlybWF0aW9uL3NlcnZpY2VzL3NlY3VyZTNkcz9yZWZlcmVuY2VkVHJhbnNhY3Rpb25JZD04NDY1MzkzMjUyNiIgfQ\"/>    <script type=\"text/javascript\">\t\t\t\tdocument.getElementById(\"tdsMmethodForm\").submit();\t\t\t</script></form>",

            "secure3dTransId": "43655151"

        }

    }

}

* Now we have to do patch call , Click on Plus (+) to get new page on postman.
* Select method as Patch and enter the below endpoint url along with ipgTransactionId which we receive in 1st API call.

[**https://cert.api.firstdata.com/gateway/v2/payments/ipgTransactionId**](https://cert.api.firstdata.com/gateway/v2/payments/ipgTransactionId)

**sample format:-**



* Below is request for method Acknowledgement which needs to be enter in body tab.
* {
* "authenticationType": "Secure3D21AuthenticationUpdateRequest",
* "storeId": "3300001300",
* "securityCode": "123",
* "methodNotificationStatus": "RECEIVED"
* }
* Click on send. Below you will get response with acs url, termurl, creq.

{

    "type": "transactionResponse",

    "clientRequestId": "5020895",

    "apiTraceId": "Zh-b2wNbEoga7EH3xRgffwAAA5M",

    "ipgTransactionId": "84653932526",

    "orderId": "TestDemtot",

    "transactionType": "SALE",

    "paymentToken": {

        "reusable": true,

        "declineDuplicates": false,

        "brand": "VISA",

        "type": "PAYMENT\_CARD"

    },

    "transactionOrigin": "ECOM",

    "paymentMethodDetails": {

        "paymentCard": {

            "expiryDate": {

                "month": "02",

                "year": "2025"

            },

            "bin": "409900",

            "last4": "1960",

            "brand": "VISA"

        },

        "paymentMethodType": "PAYMENT\_CARD",

        "paymentMethodBrand": "VISA"

    },

    "country": "USA",

    "transactionTime": 1713347538,

    "transactionAmount": {

        "total": 1,

        "currency": "INR",

        "components": {

            "subtotal": 1

        }

    },

    "transactionStatus": "WAITING",

    "approvalCode": "?:waiting 3dsecure",

    "authenticationResponse": {

        "type": "3D\_SECURE",

        "version": "2.2",

        "params": {

            "termURL": "https://test.ipg-online.com/webshop/simulator/secure3d/return",

            "acsURL": "https://3ds-acs.test.modirum.com/mdpayacs/q6mQeJCt-I8Yrb3Q/creq;token=313246001.1713347548.I6Fe-YGEZJZDIFUgwt0Xza1qee3egOuc3L-8tCraldc",

            "cReq": "ewogICAiYWNzVHJhbnNJRCIgOiAiMTUyOWEyNTUtOTI3NC00NmRkLTk0ZWQtMzViOTQ5ZGIzZTk1IiwKICAgImNoYWxsZW5nZVdpbmRvd1NpemUiIDogIjAzIiwKICAgIm1lc3NhZ2VUeXBlIiA6ICJDUmVxIiwKICAgIm1lc3NhZ2VWZXJzaW9uIiA6ICIyLjIuMCIsCiAgICJ0aHJlZURTU2VydmVyVHJhbnNJRCIgOiAiZDM0NTY3OTctMzNkYS01YTZmLTgwMDAtMDAwMDAyOWExZmVmIgp9"

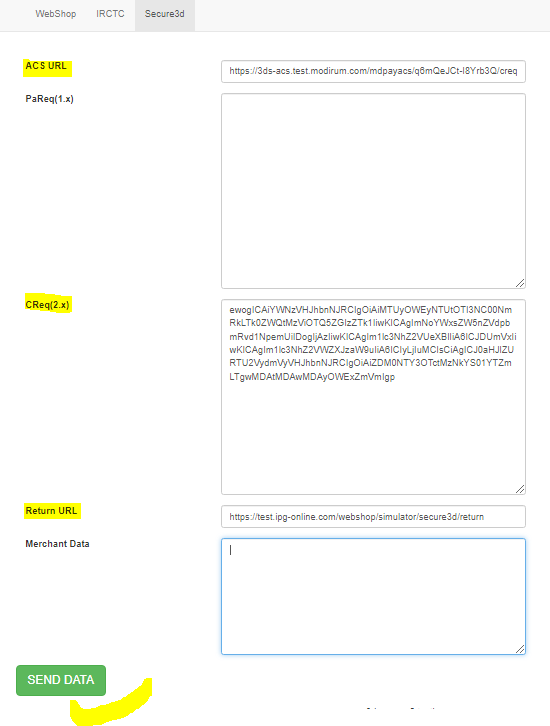
        }

    }

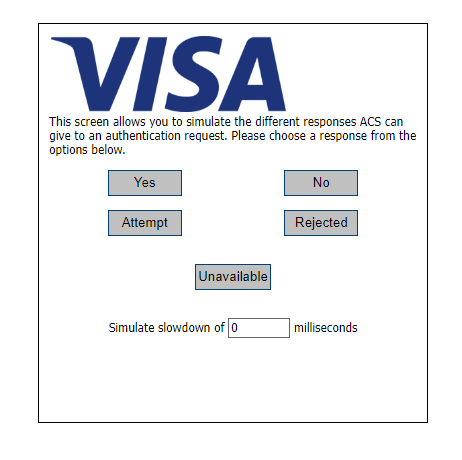
}

* Copy the values from term url , acs url and creq and paste in webshop.
* Once values entered into respective text fields in webshop then click on send Data

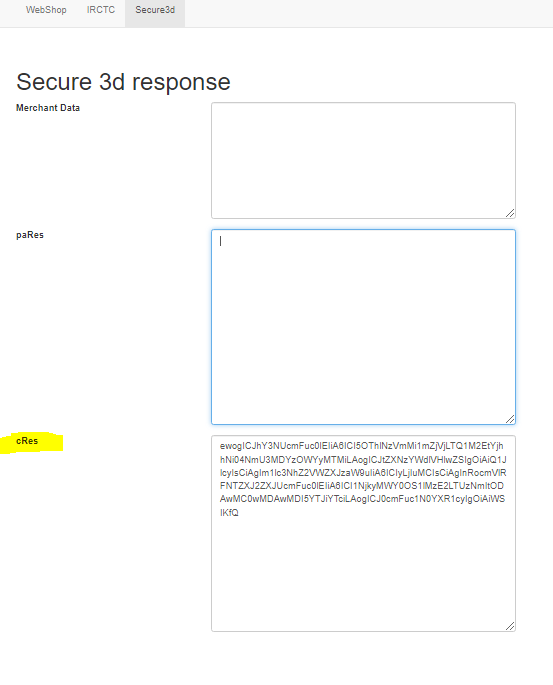
<https://test.ipg-online.com/webshop/simulator/secure3d>



* After click on Send data you will redirect on ACS page click on yes.



* Now you will get Cres in webshop, copy the Cres.



* We have to submit Cres value in webshop
* Now we have to do patch call , Click on Plus (+) to get new page on postman.
* Select method as Patch and enter the below endpoint url along with ipgTransactionId which we receive in 1st API call.

[**https://cert.api.firstdata.com/gateway/v2/payments/ipgTransactionId**](https://cert.api.firstdata.com/gateway/v2/payments/ipgTransactionId)

{

     "authenticationType": "Secure3D21AuthenticationUpdateRequest",

      "storeId": "3300001300",

      "securityCode": "123",

     "acsResponse": {

        "cRes":"ewogICJhY3NUcmFuc0lEIiA6ICIxNTI5YTI1NS05Mjc0LTQ2ZGQtOTRlZC0zNWI5NDlkYjNlOTUiLAogICJtZXNzYWdlVHlwZSIgOiAiQ1JlcyIsCiAgIm1lc3NhZ2VWZXJzaW9uIiA6ICIyLjIuMCIsCiAgInRocmVlRFNTZXJ2ZXJUcmFuc0lEIiA6ICJkMzQ1Njc5Ny0zM2RhLTVhNmYtODAwMC0wMDAwMDI5YTFmZWYiLAogICJ0cmFuc1N0YXR1cyIgOiAiWSIKfQ"

     }

}

* Click on Send button and below you will get final transaction response.

{

    "type": "transactionResponse",

    "clientRequestId": "5098851",

    "apiTraceId": "Zh-cDEN68qtsPtFum4crQAAAAvw",

    "ipgTransactionId": "84653932526",

    "orderId": "TestDemtot",

    "transactionType": "SALE",

    "paymentToken": {

        "reusable": true,

        "declineDuplicates": false,

        "brand": "VISA",

        "type": "PAYMENT\_CARD"

    },

    "transactionOrigin": "ECOM",

    "paymentMethodDetails": {

        "paymentCard": {

            "expiryDate": {

                "month": "02",

                "year": "2025"

            },

            "bin": "409900",

            "last4": "1960",

            "brand": "VISA"

        },

        "paymentMethodType": "PAYMENT\_CARD",

        "paymentMethodBrand": "VISA"

    },

    "country": "USA",

    "terminalId": "00001300",

    "merchantId": "470000000001300",

    "transactionTime": 1713347538,

    "approvedAmount": {

        "total": 1,

        "currency": "INR",

        "components": {

            "subtotal": 1

        }

    },

    "transactionAmount": {

        "total": 1,

        "currency": "INR",

        "components": {

            "subtotal": 1

        }

    },

    "transactionStatus": "APPROVED",

    "approvalCode": "Y:315630:4653932526:PPX :410809992022",

    "secure3dResponse": {

        "responseCode3dSecure": "1"

    },

    "schemeTransactionId": "000000000000000",

    "processor": {

        "referenceNumber": "410809992022",

        "authorizationCode": "315630",

        "responseCode": "00",

        "responseMessage": "Function performed error-free",

        "avsResponse": {

            "streetMatch": "NO\_INPUT\_DATA",

            "postalCodeMatch": "NO\_INPUT\_DATA"

        }

    }

}