

https://verifone.cloud/docs/uk-gateway/threeds_test_cases_checkout_1_0_2

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Checkout Test Cases 1.0.2

Note: for all test cases please use expiry year longer than 3 years from current year.

Test Case 1: Successful Authentication

Cardholder is enrolled (enrolled=Y), authentication is successful (pares_status=Y), Scenario

successful signature verification (signature_verification=Y).

Exp Date: 01/** Test Values**

Visa PAN 4000000000000002 Mastercard PAN 5200000000000007

American Express

PAN

Expected Results -

Lookup

34000000003961

N/A

```
Cardholder is enrolled (enrolled=Y), authentication is successful (pares_status=Y),
      Scenario
                                   successful signature verification (signature_verification=Y).
                       {
                       "amount": value,
                       "authentication": {
                       "signature_verification": "Y",
                       "xid": "value",
                       "pares_status": "Y",
                       "cavv": "value",
                       "payload": "value",
                       "acs_url": "value",
                       "eci_flag": "ECI value",
                       "order_id": "value",
Expected Results -
                       "error_no": "0",
Authentication Object
                       "enrolled": "Y",
                       "threeds_version": "1.0.2"
                       },
                       "card": "value",
                       "currency_code": "value",
                       "created_at": "value",
                       "organisation": "value",
```

"transaction_id": "value",

"authenticator": "value",

"_id": "value"

}

Scenario Cardholder is enrolled (enrolled=Y), authentication is successful (pares_status=Y), successful signature verification (signature_verification=Y).

Payment Transaction If "process_transaction": true, the checkout page will initiate the

authorization message and return the transaction_id on the return_url

Return_url {{return_url}}}?transaction_id=value&authentication_id=value

Merchant Action N/A

ECI Value 05 Visa, American Express

ECI Value 02 Mastercard

Test Case 2: Failed Signature

Cardholder is enrolled (enrolled=Y), authentication is successful (pares_status=Y), scenario successful signature verification (signature_verification=Y). A third party has tampered with the results.

Test Values **Exp Date: 01/******Visa PAN: **4000000000000010**

Mastercard PAN: 5200000000000015

American Express PAN 340000000000022

Expected N/A

Results - N/A

Cardholder is enrolled (enrolled=Y), authentication is successful (pares_status=Y), successful signature verification (signature_verification=Y). A third party has tampered with the results.

```
{
                  "amount": value,
                  "authentication": {
                  "signature_verification": "N",
                  "xid": "value",
                  "pares_status": "Y",
                  "cavv": "value",
                  "payload": "value",
                  "acs_url": "value",
                  "eci_flag": "ECI value",
                  "order_id": "value",
Expected
Results -
                  "error_no": "0",
Authentication
Object
                  "enrolled": "Y",
                  "threeds_version": "1.0.2"
                  },
                  "card": "value",
                  "currency_code": "value",
                  "created_at": "value",
                  "organisation": "value",
                  "transaction_id": "value",
                  "authenticator": "value",
                  " id": "value"
```

Cardholder is enrolled (enrolled=Y), authentication is successful (pares_status=Y),
Scenario successful signature verification (signature_verification=Y). A third party has tampered with the results.

Payment If "process_transaction": true, the checkout page will not initiate the

Transaction authorization message and will return an error in the return_url.

{{return_url}}?authentication_id=value&error=

Return_url %27Transaction%20cannot%20be%20initiated%20because%20

signature%20verification%20in%20the%20authentication%20process%20failed.%27

Merchant

Action Merchant should reinitiate the checkout, or prompt for another payment.

ECI Value 05 Visa, American Express

ECI Value 02 Mastercard

Test Case 3: Failed Authentication

The authentication has failed, e.g. Cardholder failed the authentication challenge. Cardholder scenario enrolled (enrolled=Y), Unsuccessful authentication (pares_status=N), successful signature verification.

Test Values **Exp Date: 01/******Visa PAN **400000000000028**

Mastercard

PAN 5200000000000023

American 34000000000033

Express PAN

Results - N/A

Lookup

Expected

The authentication has failed, e.g. Cardholder failed the authentication challenge. Cardholder enrolled (enrolled=Y), Unsuccessful authentication (pares_status=N), successful signature verification.

```
{
                "amount": value,
                "authentication": {
                "signature_verification": "Y",
                "xid": "value",
                "pares_status": "N",
               "payload": "value",
                "acs_url": "value",
                "eci_flag": "ECI value",
                "order_id": "value",
Expected
                "error_no": "0",
Results -
Authentication "enrolled": "Y",
Object
                "threeds_version": "1.0.2"
                },
                "card": "value",
                "currency_code": "value",
                "created at": "value",
                "organisation": "value",
                "transaction_id": "value",
                "authenticator": "value",
               "_id": "value"
```

Payment Transaction If "process_transaction": true, the checkout page will not initiate the authorization message and an error would be returned.

Scenario The authentication has failed, e.g. Cardholder failed the authentication challenge. Cardholder enrolled (enrolled=Y), Unsuccessful authentication (pares_status=N), successful signature verification.

{{return_url}}?authentication_id=value&error=

Return_url %27Transaction%20cannot%20be%20initiated%20because%20authentication%20has%20failed.%27

Merchant

Action Merchant should reinitiate the checkout, or prompt for another payment.

ECI Value 07 Visa, American Express

ECI Value 00 Mastercard

Test Case 4: Attempts/Non-Participating

The merchant attempts authentication of the cardholder but the issuer is yet to participate in 3DS or its access control server is unable to respond. The scheme responds on behalf of the Issuer. it is otherwise known as Passive Authentication, and the cardholder is not prompted for authentication credential.

Test Values Exp Date: 01/****
Visa PAN 400000000000101
Mastercard PAN 5200000000000908

American 34000000003391

Express PAN

Scenario

Expected

Results - N/A

The merchant attempts authentication of the cardholder but the issuer is yet to participate in 3DS or its access control server is unable to respond. The scheme responds on behalf of the Issuer. it is otherwise known as Passive Authentication, and the cardholder is not prompted for authentication credential.

```
{
                 "amount": value,
                 "authentication": {
                 "threeds_version": "1.0.2",
                 "enrolled": "Y",
                 "error_no": "0",
                 "order_id": "value",
                 "eci_flag": "ECI value",
                 "signature_verification": "Y",
                 "cavv": "value",
Expected
Results -
                 "pares_status": "A",
Authentication
                 "xid": "value"
                 },
                 "card": "value",
                 "currency_code": "value",
                 "created_at": "value",
                 "organisation": "value",
                 "transaction_id": "value",
                 "authenticator": "value",
                 " id": "value"
Payment
                 If "process_transaction": true, the checkout page will initiate the authorization
Transaction
                 message and return the transaction_id on the return_url
                 {{return url}}?transaction id=value&authentication id=value
Return url
```

The merchant attempts authentication of the cardholder but the issuer is yet to participate in 3DS or its access control server is unable to respond. The scheme responds on behalf of the Issuer. it is otherwise known as Passive Authentication, and the cardholder is not prompted for authentication credential.

Merchant Action N/A

Visa, American Express ECI Value 06

ECI Value 01 Mastercard

Test Case 5: Timeout

Any of the involved components delayed to response and a timeout was triggered while waiting the Scenario authentication (lookup) response.

Exp Date: 01/** Test Values** 4000000000000044 Visa PAN

Mastercard 5200000000000049 **PAN**

American 340000000008309 Express PAN:

Expected

Results -N/A

```
Scenario
```

Any of the involved components delayed to response and a timeout was triggered while waiting the authentication (lookup) response.

```
{
              "amount": value,
              "authentication": {
              "threeds_version": "1.0.2",
              "enrolled": "U",
              "error_no": "value",
              "error_desc": "value"
              "order_id": "value",
              "eci_flag": "ECI value"
Expected
Results -
Authentication },
              "card": "value",
              "currency_code": "value",
              "created_at": "value",
              "organisation": "value",
              "transaction_id": "value",
              "authenticator": "value",
              "_id": "value"
Payment
              If "process_transaction": true, the checkout page will not initiate the authorization message
Transaction
              due to an error in the authentication and will return the error on the return_url
              {{return_url}}?authentication_id=value&error= %27An%20error%20took
Return_url
              place%20during%20the%20authentication.
              %20Please%20refer%20to%20the%20Reason%20Code%20or%20contact%20your%20Administrator.%
Merchant
              Merchant should reinitiate the checkout, or prompt for another payment.
Action
ECI Value 07 Visa, American Express
ECI Value 00 Mastercard
```

Test Case 6: Not Enrolled

Scenario	The issuer of the card does not participate in 3-D Secure or the specific card number is not enrolled for 3-D Secure. (enrolled=N)
Test Values	Exp Date: 01/****
Visa PAN Mastercard PAN	40000000000051 5200000000056
American Express PAN:	34000000008135
Expected Results - Lookup	N/A
	{
	"amount": value,
	"authentication": {
	"threeds_version": "1.0.2",
	"enrolled": "N",
	"error_no": "0",
	"order_id": "value",
	"eci_flag": "ECI value"
Expected Results - Authentication Object	},
	"card": "value",
	"currency_code": "value",
	"created_at": "value",
	"organisation": "value",
	"transaction_id": "value",
	"authenticator": "value",
	"_id": "value"
	}
Payment Transaction	If "process_transaction": true, the checkout page will initiate the authorization message and return the transaction_id on the return_url
Return_url	{{return_url}}}?transaction_id=value&authentication_id=value

Scenario	The issuer of the card does not participate in 3-D Secure or the specific card number is not enrolled for 3-D Secure. (enrolled=N)
Merchant Action	Merchant should reinitiate the checkout with 3DS, if the Authorization is declined by the issuer.
ECI Value 06	Visa
ECI Value 07	American Express
ECI Value 00	Mastercard

Test Case 7: Unavailable

Scenario	Authentication was unavailable, any of the components involved in 3DS flow was not available. (enrolled=U)
Test Values	Exp Date: 01/****
Visa PAN	40000000000069
Mastercard PAN	520000000000064
American Express PAN:	34000000007780
Expected Results - Lookup	N/A

```
Authentication was unavailable, any of the components involved in 3DS flow was
      Scenario
                                                    not available. (enrolled=U)
                       {
                       "amount": value,
                       "authentication": {
                       "threeds_version": "1.0.2",
                       "enrolled": "U",
                       "error_no": "0",
                       "order_id": "value",
                       "eci_flag": "ECI value"
Expected Results -
Authentication Object
                       "card": "value",
                       "currency_code": "value",
                       "created_at": "value",
                       "organisation": "value",
                       "transaction_id": "value",
                       "authenticator": "value",
                       " id": "value"
                      }
                      If "process_transaction": true, the checkout page will initiate the
Payment Transaction
                      authorization message and return the transaction_id on the return_url
Return url
                       {{return_url}}?transaction_id=value&authentication_id=value
                      Merchant should reinitiate the checkout with 3DS, if the Authorization is declined by
Merchant Action
                      the issuer.
ECI Value 07
                      Visa, American Express
ECI Value 00
                      Mastercard
```

Test Case 8: lookup error

Scenario An error took place during the 3DS flow. The authentication response (lookup) will contain an err
Test Values Exp Date: 01/****

```
Scenario
               An error took place during the 3DS flow. The authentication response (lookup) will contain an err
Visa PAN
               4000000000000085
Mastercard
               52000000000000080
PAN
American
               340000000006337
Express PAN
Expected
Results -
              N/A
Lookup
               {
               "amount": value,
              "authentication": {
               "threeds_version": "1.0.2",
               "enrolled": "U",
               "error_no": "value",
              "error_desc": "value"
               "order_id": "value",
Expected
               "eci_flag": "ECI value"
Results -
Authentication },
Object
               "card": "value",
              "currency_code": "value",
               "created_at": "value",
               "organisation": "value",
               "transaction_id": "value",
               "authenticator": "value",
              "_id": "value"
              If "process_transaction": true, the checkout page will not initiate the authorization message
Payment
Transaction
               due to an error in the authentication and return the error on the return_url
```

Scenario An error took place during the 3DS flow. The authentication response (lookup) will contain an err

{{return_url}}?authentication_id=value&error=%27An%20error%20took

Return_url place% 20during% 20the% 20authentication.

%20Please%20refer%20to%20the%20Reason%20Code%20or%20contact%20your%20Administrator.%

Merchant

Merchant should reinitiate the checkout, or prompt for another payment. Action

ECI Value 07 Visa, American Express

ECI Value 00 Mastercard

Test Case 9: authenticate error

Scenario An error took place during the result request or challenge flow, and the JWT will contain an error

Exp Date: 01/**** **Test Values** Visa PAN 4000000000000093

Mastercard

5200000000000098 **PAN**

American

340000000009299 **Express PAN**

Expected

Results -N/A

```
Scenario
               An error took place during the result request or challenge flow, and the JWT will contain an error
              {
              "amount": value,
              "authentication": {
              "payload": "value",
              "acs_url": "value",
              "eci_flag": "ECI value",
              "order_id": "value",
              "error_no": "value",
              "error_desc": "value"
Expected
              "enrolled": "Y",
Results -
Authentication "threeds_version": "1.0.2"
              },
              "card": "value",
              "currency_code": "value",
              "created_at": "value",
              "organisation": "value",
              "transaction_id": "value",
              "authenticator": "value",
              " id": "value"
Payment
              If "process_transaction": true, the checkout page will not initiate the authorization message
              due to an error in the authentication and return the error on the return_url
Transaction
              {{return_url}}}?authentication_id=value&error=%27An%20error%20took
              place%20during%20the%20authentication.
Return url
              %20Please%20refer%20to%20the%20Reason%20Code%20or%20contact%20your%20Administrator.%
Merchant
              Merchant should reinitiate the checkout, or prompt for another payment.
Action
ECI Value 07 Visa, American Express
```

Scenario An error took place during the result request or challenge flow, and the JWT will contain an error ECI Value 00 Mastercard

Test Case 10: Authentication Unavailable

Cardholder is enrolled (enrolled=Y), authentication request (lookup) has suceeded, but during challenge and results request (JWT) a 3DS component was unavailable, **Scenario**

resulting the transaction to fail (pares_status=U).

Exp Date: 01/**** Test Values Visa PAN 4000000000000036 Mastercard PAN 5200000000000031

American Express

PAN

34000000000116

Expected Results - N/A

Cardholder is enrolled (enrolled=Y), authentication request (lookup) has suceeded,but during challenge and results request (JWT) a 3DS component was unavailable, resulting the transaction to fail (pares_status=U).

```
{
                    "amount": value,
                    "authentication": {
                    "error_desc": "value",
                    "signature_verification": "Y",
                    "xid": "value",
                    "pares_status": "U",
                    "payload": "value",
                    "acs_url": "value",
                    "eci_flag": "ECI value",
                    "order_id": "value",
Expected Results -
Authentication
                    "error no": "0",
Object
                    "enrolled": "Y",
                    "threeds_version": "1.0.2"
                    },
                    "card": "value",
                    "currency_code": "value",
                    "created_at": "value",
                    "organisation": "value",
                    "transaction_id": "value",
                    "authenticator": "value",
                    " id": "value"
```

Payment Transaction

If "process_transaction": true, the checkout page will initiate the authorization message and return the transaction_id on the return_url

ECI Value 00 Mastercard