

## Test Cases for 3DS 1.0

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

### Test Case 1: Successful authentication

<b>Scenario</b>	<b>Cardholder enrolled, successful authentication, successful signature verification.</b>
Test Values	<b>Exp Date: 01/****</b>
Visa PAN	<b>4000000000000002</b>
Mastercard PAN	<b>5200000000000007</b>
American Express PAN	<b>340000000003961</b>
Discover PAN	<b>6011000000000004</b>
Diners Club PAN	<b>3005000000006246</b>
Expected Results - Lookup	Enrolled = Y, ACSUrl = <Url>, Payload = <value>, ErrorNo = 0, ErrorDesc = <blank>
Expected Results - Authentication	PAResStatus = Y, SignatureVerification = Y, EciFlag = <ECI value>, Xid = <value>, Cavv = <value>, ErrorNo = 0, ErrorDesc = <value>
Merchant Action	Merchant should append the CAVV and EciFlag values to the authorization message.
ECI Value 05	Visa, American Express, Discover, Diners Club
ECI Value 02	Mastercard

### Test Case 2: Failed signature

<b>Scenario</b>	<b>Cardholder enrolled, successful authentication, unsuccessful signature verification.</b>
Test Values	<b>Exp Date: 01/****</b>
Visa PAN	<b>4000000000000010</b>
Mastercard PAN	<b>5200000000000015</b>
American Express PAN	<b>340000000006022</b>
Discover PAN	<b>6011000000000012</b>
Diners Club PAN	<b>3005000000004373</b>

<b>Scenario</b>	<b>Cardholder enrolled, successful authentication, unsuccessful signature verification.</b>
Expected Results - Lookup	Enrolled = Y, ACSUrl = <Url>, Payload = <value>, ErrorNo = 0, ErrorDesc = <blank>
Expected Results - Authentication	PAResStatus = Y, SignatureVerification = N, EciFlag = <ECI value>, Xid = <value>, Cavv = <value>, ErrorNo = 0, ErrorDesc = <value>
Merchant Action	Merchant should NOT continue authorization, due to the failed signature verification. Merchant should prompt for another form of payment or attempt to authenticate the consumer.
ECI Value 05	Visa, American Express, Discover, Diners Club
ECI Value 02	Mastercard

### Test Case 3: Failed authentication

<b>Scenario</b>	<b>Cardholder enrolled, unsuccessful authentication, successful signature verification.</b>
Test Values	<b>Exp Date: 01/****</b>
Visa PAN	<b>4000000000000028</b>
Mastercard PAN	<b>5200000000000023</b>
American Express PAN	<b>3400000000000033</b>
Discover PAN	<b>6011000000000020</b>
Diners Club PAN	<b>3005000000005925</b>
Expected Results - Lookup	Enrolled = Y, ACSUrl = <Url>, Payload = <value>, ErrorNo = 0, ErrorDesc = <blank>
Expected Results - Authentication	PAResStatus = N, SignatureVerification = Y, EciFlag = <ECI value>, Xid = <value>, Cavv = <blank>, ErrorNo = 0, ErrorDesc = <value>
Merchant Action	Merchant should NOT continue with authorization. Merchant should prompt for another form of payment and is not permitted to submit this transaction for authorization.
ECI Value 07	Visa, American Express, Discover, Diners Club

<b>Scenario</b>	<b>Cardholder enrolled, unsuccessful authentication, successful signature verification.</b>
ECI Value 00	Mastercard

## Test Case 4: Attempts/Non-Participating

<b>Scenario</b>	<b>Passive Authentication - cardholder not prompted for authentication credential.</b>
Test Values	<b>Exp Date: 01/****</b>
Visa PAN	<b>4000000000000101</b>
Mastercard PAN	<b>5200000000000908</b>
American Express PAN	<b>340000000003391</b>
Discover PAN	<b>601100000000038</b>
Diners Club PAN	<b>3005000000005271</b>
Expected Results - Lookup	Enrolled = Y, ACSUrl = <Url>, Payload = <value>, ErrorNo = 0, ErrorDesc = <blank>
Expected Results - Authentication	PAResStatus = A, SignatureVerification = Y, EciFlag = <ECI value>, Xid = <value>, Cavv = <value>, ErrorNo = 0, ErrorDesc = <blank>
Merchant Action	Merchant should append the Cavv and the EciFlag to the authorization message.
ECI Value 06	Visa, American Express, Discover, Diners Club
ECI Value 01	Mastercard

## Test Case 5: Timeout

<b>Scenario</b>	<b>Timeout encountered while processing the lookup transaction.</b>
Test Values	<b>Exp Date: 01/****</b>
Visa PAN	<b>4000000000000044</b>
Mastercard PAN	<b>5200000000000049</b>

Scenario	Timeout encountered while processing the lookup transaction.
American Express PAN:	<b>340000000008309</b>
Discover PAN	<b>601100000000046</b>
Diners Club PAN	<b>300500000001890</b>
Expected Results - Lookup	Enrolled = U, ACSUrl = <blank>, Payload = <blank>, ErrorNo = <value>, ErrorDesc = <value>
Expected Results - Authentication	N/A
Merchant Action	The lookup transaction will simulate a timeout scenario and require 20 seconds to complete the transaction processing with the other 3-D Secure systems. Merchant integration should handle timeout processing after 10-12 seconds and proceed with the authorization message.
ECI Value 07	Visa, American Express, Discover, Diners Club
ECI Value 00	Mastercard

## Test Case 6: Not enrolled

Scenario	Cardholder not enrolled. Issuing Bank not participating.
Test Values	<b>Exp Date: 01/****</b>
Visa PAN	<b>400000000000051</b>
Mastercard PAN	<b>520000000000056</b>
American Express PAN:	<b>340000000008135</b>
Discover PAN	<b>601100000000053</b>
Diners Club PAN	<b>300500000007269</b>
Expected Results - Lookup	Enrolled = N, ACSUrl = <blank>, Payload = <blank>, ErrorNo = 0, ErrorDesc = <blank>, EciFlag = <ECI value>
Expected Results - Authentication	N/A
Merchant Action	Merchant should submit the authorization with an ECI of 06.
ECI Value 06	Visa

Scenario	Cardholder not enrolled. Issuing Bank not participating.
ECI Value 07	American Express, Discover, Diners Club
ECI Value 00	Mastercard

## Test Case 7: Unavailable

Scenario	Authentication unavailable (lookup message response).
Test Values	<b>Exp Date: 01/****</b>
Visa PAN	<b>4000000000000069</b>
Mastercard PAN	<b>5200000000000064</b>
American Express PAN:	<b>340000000007780</b>
Discover PAN	<b>6011000000000061</b>
Diners Club PAN	<b>3005000000006030</b>
Expected Results - Lookup	Enrolled = U, ACSUrl = <blank>, Payload = <blank>, ErrorNo = 0, ErrorDesc = <blank>, EciFlag = <ECI value>
Expected Results - Authentication	N/A
Merchant Action	Merchant should proceed with the authorization message.
ECI Value 07	Visa, American Express, Discover, Diners Club
ECI Value 00	Mastercard

## Test Case 9: Lookup error

Scenario	Error response to lookup message.
Test Values	<b>Exp Date: 01/****</b>
Visa PAN	<b>4000000000000085</b>
Mastercard PAN	<b>5200000000000080</b>
American Express PAN	<b>340000000006337</b>
Discover PAN	<b>6011000000000087</b>

Scenario	Error response to lookup message.
Diners Club PAN	<b>3005000000009877</b>
Expected Results - Lookup	Enrolled = U, ACSUrl = <blank>, Payload = <blank>, ErrorNo = <value>, ErrorDesc = <value>, EciFlag = <ECI value>
Expected Results - Authentication	N/A
Merchant Action	Merchant should continue with the authorization and contact technical support to investigate and resolve the issue.
ECI Value 07	Visa, American Express, Discover, Diners Club
ECI Value 00	Mastercard

## Test Case 10: Authenticate error

Scenario	Cardholder enrolled, error response to authenticate message.
Test Values	<b>Exp Date: 01/****</b>
Visa PAN	<b>4000000000000093</b>
Mastercard PAN	<b>5200000000000098</b>
American Express PAN	<b>340000000009299</b>
Discover PAN	<b>6011000000000095</b>
Diners Club PAN	<b>3005000000005602</b>
Expected Results - Lookup	Enrolled = Y, ACSUrl = <Url>, Payload = <value>, ErrorNo = 0, ErrorDesc = <blank>
Expected Results - Authentication	PAResStatus = <blank>, SignatureVerification = <blank>, EciFlag = <ECI value> Xid = <blank>, Cavv = <blank>, ErrorNo = <value>, ErrorDesc = <value>
Merchant Action	Merchants have the option of retaining the liability and submitting the transaction as non-authenticated. An alternative action would be to prompt for another form of payment.
ECI Value 07	Visa, American Express, Discover, Diners Club
ECI Value 00	Mastercard

## Test Case 11: Authentication unavailable

Scenario	Cardholder enrolled.
Test Values	<b>Exp Date: 01/****</b>
Visa PAN	<b>4000000000000036</b>
Mastercard PAN	<b>5200000000000031</b>
American Express PAN	<b>340000000000116</b>
Discover PAN	<b>601100000000103</b>
Diners Club PAN	<b>3005000000007376</b>
Expected Results - Lookup	Enrolled = Y, ACSUrl = <Url>, Payload = <value>, ErrorNo = 0, ErrorDesc = <blank>
Expected Results - Authentication	PAResStatus = U, SignatureVerification = Y, EciFlag = <value>, Xid = <value>, Cavv = <blank>, ErrorNo = 0, ErrorDesc = <value>
Merchant Action	Merchant can retry authentication or process authorization as merchant liability.
ECI Value 07	Visa, American Express, Discover, Diners Club
ECI Value 00	Mastercard