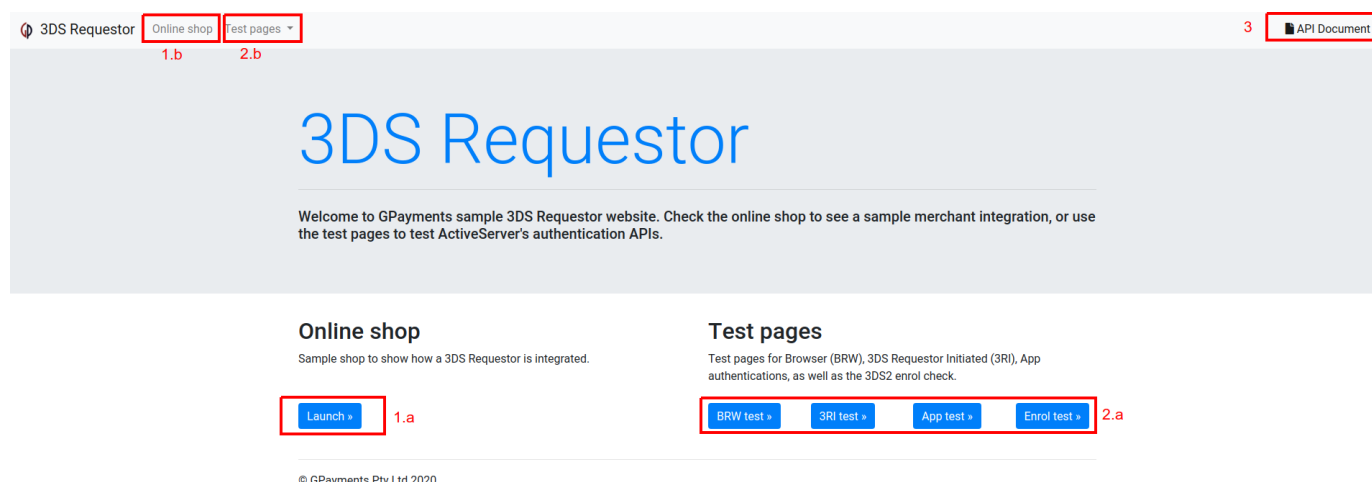


Sample code features

In this section, we show all the features of the **3DS Requestor Demo** project. You can access the 3DS Requestor demo by:

- Downloading and running the 3DS Requestor demo code [here](#), or
- Using our online [TestLabs Requestor](#)

Shown below is the index page of the 3DS Requestor site. There are two parts, **Online shop** and **Test pages**. The online shop can be accessed by selecting the **Launch** button (1.a) or selecting the **Online shop** button (1.b) at the top left. Each test page can be accessed by selecting the associated buttons (2.a) or selecting the **Test pages** dropdown (2.b) at the top left. Additionally, at the top right there is a **API Document** link (3) which will direct you to the **ActiveServer Authentication API Reference** document.



Online Shop

The online shop is a demo merchant checkout page that gives a merchant side view of how to integrate 3DS2 into an eCommerce site. For the implementation of the integration, follow the [Integration Guide](#). To make a test transaction:

Add items to the cart in the shop page and select the **Continue to Checkout** button to move to the checkout page:

3DS Requestor
Online shop
Test pages
API Document



Apple
Freshly picked Cavendish Apple. Delivery next day.

Price \$2.00
Quantity

Add to cart



Pineapple
Freshly picked Cavendish Pineapple. Delivery next day.

Price \$5.00
Quantity

Add to cart



Banana
Freshly picked Cavendish Banana. Delivery next day.

Price \$3.00
Quantity

Add to cart

Your cart Total \$3.00



Banana
\$3.00 Quantity: 1

Continue to checkout

Default payment and billing information is pre-filled, including a card number, which can be used to complete a frictionless transaction. Select the **Checkout** button to trigger the 3DS2 authentication process:

Note

You can select the API version to perform the 3DS2 authentication process by clicking the arrow at the right of the **Checkout** button.

3DS Requestor
Online shop
Test pages
API Document

Cardholder Information

Payment

Name on card
Card Number
Expiry Date (YYMM)
Currency

Billing details

Address Line 1
Address Line 2
Address Line 3
City
State
ZIP
Country Code

Is this address also your shipping address?
☒ Yes
☐ No

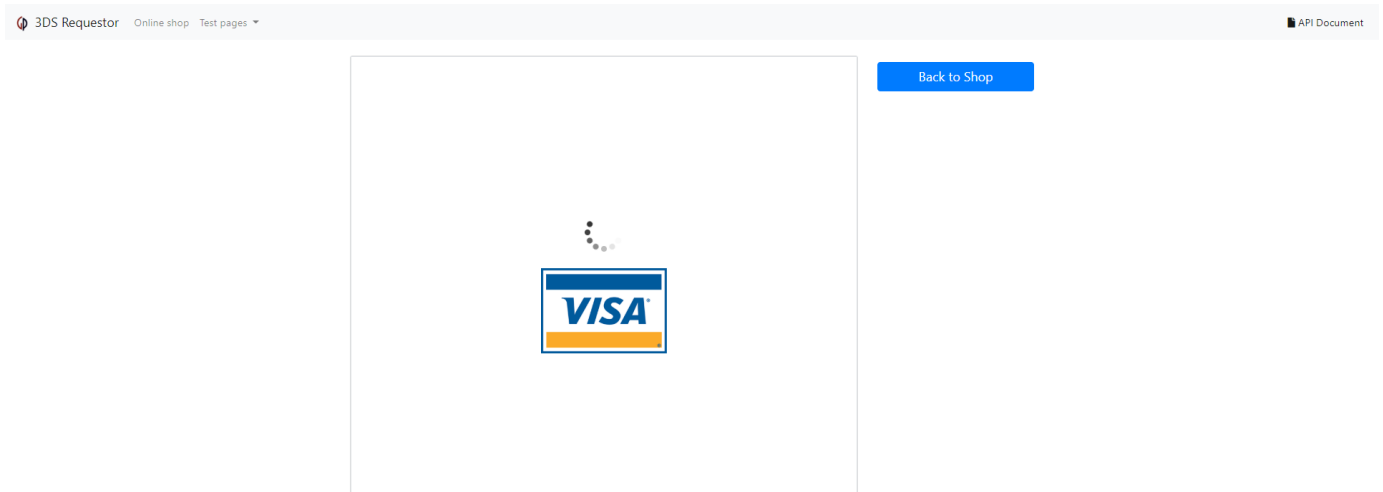
Your cart Total \$3.00



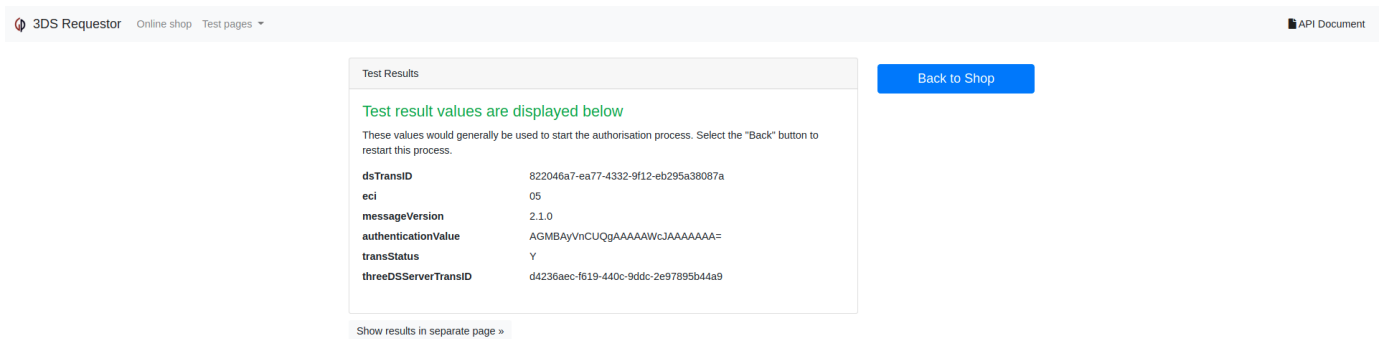
Banana
\$3.00 Quantity: 1

Checkout (v2) ▾

There is a spinner on the processing page while the 3DS2 authentication is in progress:



After the 3DS2 authentication is finished the result will be shown:



Selecting the **Show results in separate pages** will open a new page to show the results.

Challenge flow

The above demonstrates a frictionless authentication. If the authentication requires a cardholder challenge, this will be shown after the first spinner processing page.

Test Pages

The test pages allow you to test the **Browser-based Authentication (BRW)**, **3DS Requestor Initiated (3RI)**, **App**, and **Enrol** channels with all the parameters defined in the [API document](#).

BRW Test Page

The BRW test page has four tabs, **Basic Info**, **Cardholder**, **Additional Risk** and **Test Options**.

Basic Info

Basic Info

Cardholder

Additional Risk

Test Options

Channel

Auth API URL *

https://api.as.testlab.3dsecure.cloud:7443

Requestor URL *

http://localhost:8082

Directory Server *

☒ TestLab ☐ Production

Message Version *

☒ Not specified ☐ 2.1.0 ☐ 2.2.0

Required Field

Provider:

Visa

Scenario:

Frictionless authentication

Account Number *

4100000000000100

Merchant ID *

123456789012345

Authentication Indicator *

Payment transaction (01)

Message Category *

☒ Payment Auth ☐ Non-payment Auth

Additional Field

Purchase Amount

100

Purchase Currency

036

Account ID

personal account

Account Type

Debit (3)

The **Basic Info** tab has three sections, **Channel**, **Required Field**, and **Additional Field**.

In **Channel**, you can check the **3DS Server URL** and the **Requestor URL** that have been [loaded into the application](#). You can also select which **Directory Server** is used for the test and choose the EMV **Message Version**.

In **Required Field**, you need to fill in the **Account Number**, **Merchant ID**, **Authentication Indicator**, and **Message Category**. The **Merchant ID** must match the one from the merchant profile you are using, which also corresponds to the **client certificate** being used.

Using GPayments TestLabs scenarios

For the **Account Number**, you can fill in an account number manually, or you can choose from our predefined scenarios. For example, you can choose **Visa** with **Frictionless authentication** and the account number **4100000000000100** will automatically be filled in the Account Number field.

The demo 3DS Requestor allows you to trigger various 3DS2 authentication scenarios by specifying a card number before the authentication. To check the card list for different authentication scenarios, refer to the [TestLabs guide](#) for details.

In **Additional Field**, you can fill in additional information such as the **Purchase amount**, **Purchase currency**, **Expiry date**, etc.

Cardholder

On the **Cardholder** tab, you can fill in cardholder information, including the **Card holder name**, **Email**, phone numbers and address details.

Basic Info	Cardholder	Additional Risk	Test Options
------------	------------	-----------------	--------------

Card details

Card Holder Name	Test Card		
Email	abc@123.com		
Mobile Number	61	0421522329	
Home Phone			
Work Phone			

Billing details

Address Line 1	Unit 1		
Address Line 2	123 Street		
Address Line 3			
City	Sydney		
State	NSW		
ZIP	2000		
Country Code	036		

Is this address also your shipping address?

☒ Yes

☐ No

Additional Risk

On the **Additional Risk** tab, you can fill in other additional risk information, such as the account information, the requestor authentication information, and the merchant risk indicator.



Merchant risk information

This information is optional to provide. However, it is very beneficial for the merchant to provide this information if it is available, as it will assist the issuers ACS with risk-based authentication, and potentially lead to higher rates of frictionless authentications.

Basic Info

Cardholder

Additional Risk

Test Options

Account Information

Cardholder Account Age
Indicator

Cardholder Account Change

Cardholder Account Change
Indicator

Cardholder Account Date

Cardholder Account
Password Change

Cardholder Account
Password Change Indicator

Number of Purchase Account

Payment Account Age

Payment Account Indicator

Provision Attempts Day

Ship Address Usage

Ship Address Usage Indicator

Ship Name Indicator

Suspicious Account Activity

Transaction Activity Day

Transaction Activity Year

Test Options

On the **Test Options** tab, firstly, you can choose which API version to use to perform the 3DS authentication process.

Secondly, you can choose to cancel a challenge if the ACS requests one for the transaction by selecting the **Cancel Challenge** checkbox. When cancelling the challenge, the **3ds-web-adapter** will not execute the CReq callback page in the iframe. Optionally the **Cancel Reason** can then be specified using the **challengeStatus** endpoint to let **ActiveServer** know why the challenge is being cancelled:

- **CReq Not Sent**: indicates that the challenge request was not initiated due to the 3DS Requestor choosing to opt out of the challenge. Will send a status of **CReqNotSent** to the **challengeStatus** endpoint.
- **Auth Result Not Delivered**: indicates that the challenge request was not able to be delivered to the 3DS Requestor due to a technical error, such as **ActiveServer** not responding when the 3DS Requestor executes an authentication request. Will send a status of **AuthResultNotDelivered** to the **challengeStatus** endpoint.
- **No Reason Sent**: simulates a scenario where the 3DS Requestor does not initiate the challenge, but also does not call the **challengeStatus** endpoint, meaning no reason will be sent to **ActiveServer**.

Lastly, you can decide the challenge window size by selecting the **Challenge Window Size** options. This will be included in the authentication request to the ACS, requesting them to display the challenge page to the cardholder in a specific size which is conducive to the merchants checkout website.

[Basic Info](#) [Cardholder](#) [Additional Risk](#) [Test Options](#)

API Options

Api Version *

v2

Challenge Options

3DS requestor can decide whether to proceed the challenge or not. By selecting the following checkbox, the requestor will cancel the challenge.

Cancel Challenge ☐

Cancel Reason

CReq Not Sent

3DS requestor can decide the challenge window size by selecting the following options. 3DS requestor needs to make sure the iframe container has the same size as defined below.

Challenge Window Size
(width x height in pixels)

3RI Test Page

The 3RI test page initiates an authentication using the 3RI channel. Similar to the BRW test page, the 3RI test page has three tabs, **Basic Info** , **Cardholder** , and **Additional Risk** . One difference is that there is a **3RI Indicator** parameter in the **Required Field** section and there are also less parameters in the **Additional Field** due to the nature of 3RI.

Basic Info

Cardholder

Additional Risk

Channel

Auth API URL *

https://api.as.testlab.3dsecure.cloud:7443

Requestor URL *

http://localhost:8082

Directory Server *

☒ TestLab ☐ Production

Message Version *

☒ Not specified ☐ 2.1.0 ☐ 2.2.0

Required Field

Account Number *

4100000000000100

Merchant ID *

123456789012345

3RI Indicator *

Recurring transaction (01) ▼

Message Category *

☐ Payment Auth ☒ Non-payment Auth

Additional Field

Account ID

personal account

Account Type

Debit (03) ▼

Expiry Date (YYMM)

Overridden Merchant Name

App Test Page

The App test page initiates an authentication using the App channel. The App test page uses a hardcoded mock AReq for App channel authentication. This data is only for test or demo purposes. For a production authentication, App authentication requests must be initiated by an integrated 3DS SDK.

App Test Info

Channel

Auth API URL *`https://api.as.testlab.3dsecure.cloud:7443`**Requestor URL ***`http://localhost:8082`**Directory Server ***☒ TestLab ☐ Production**Message Version ***☒ Not specified ☐ 2.1.0 ☐ 2.2.0

Auth data

Below is the mock AReq for APP channel authentication. This data is only for test/demo purposes. For a production authentication, APP auth requests must be initiated by an integrated 3DS SDK.

```
{
  "acctNumber": "4100000000000100",
  "authenticationInd": "01",
  "merchantId": "123456789012345",
  "purchaseAmount": 66600,
  "purchaseCurrency": "036",
  "acctID": "personal account",
  "acctType": "01",
  "cardExpiryDate": "2508",
  "transType": "01",
  "challengeInd": "01",
  "purchaseDate": "20200409093228",
  "messageCategory": "pa",
  "sdkAppID": "96a4a91d-58d0-988d-7f93-e0005b888961",
  "sdkEncData":
```

Response

Enrol Test Page

The enrol test page initiates an **/enrol** check with **ActiveServer**, which is used to see if a card is in a card range that supports 3DS2. Only an **Account Number** and a **Merchant ID** are required for the enrol test.

Enrol Information

Channel

Auth API URL *

https://api.as.testlab.3dsecure.cloud:9443

Requestor URL *

http://localhost:8082

Directory Server *

☒ TestLab ☐ Production

Required Field

Account Number *

4100000000000100

Merchant ID *

123456789012345

Test Results

After selecting the **Test** button on one of the test pages, you will be directed to [process.html](#). All the 3DS2 processes will be handled by a [process.html](#) page and there will be a spinner while the 3DS2 process is running. When the 3DS2 process is done, the results will be displayed on the same page.

For example, if you select **BRW test** page then select **Test BRW** button with pre-filled information, it will get a successful response.

Test Results

Back to Shop

Test result values are displayed below

These values would generally be used to start the authorisation process. Select the "Back" button to restart this process.

dsTransID	822046a7-ea77-4332-9f12-eb295a38087a
eci	05
messageVersion	2.1.0
authenticationValue	AGMBayVnCUQgAAAAAWcJAAAAAA=
transStatus	Y
threeDSServerTransID	d4236aec-f619-440c-9ddc-2e97895b44a9

Show results in separate page »

Or, you can fill in an invalid parameter in **BRW test** page (e.g. **000** for **Merchant ID**), and it will return an error information.

Test Results

Test result values are displayed below

These values would generally be used to start the authorisation process. Select the "Back" button to restart this process.

errorCode	1026
errorDetail	MerchantId does not match.
errorDescription	MerchantId does not match.
errorComponent	S
errorMessageType	AReq
messageType	Erro

No-script Test

The demo requestor has demo code for a no-script environment. To test, [disable Javascript in your browser](#) then go to the index page.

 3DS Requestor Online shop Test pages  API Document

3DS Requestor

Welcome to GPayments sample 3DS Requestor website. Check the online shop to see a sample merchant integration, or use the test pages to test ActiveServer's authentication APIs.

Online shop

Sample shop to show how a 3DS Requestor is integrated.

[Launch »](#)

Test pages

Test pages for Browser (BRW), 3DS Requestor Initiated (3RI), App authentications, as well as the 3DS2 enrol check.

[BRW test »](#) [3RI test »](#) [App test »](#) [Enrol test »](#)

JavaScript disabled. Press the button below to start authentication.

[No-Script test »](#)

The no-script test page can be accessed by selecting the **No-Script test** button. Follow the instructions on this page to do a demo transaction with Javascript disabled.

No-script

[Test No-Script](#)

Account Number: *	4100000000000100
Merchant ID: *	123456789012345
Trans-type:	testLab
Message Version:	2.1.0
Authentication Ind:	01
Purchase Amount:	10000
Purchase Currency:	036
Message Category:	pa
Purchase Date:	20201111000101
3DS Requestor Dec Req Ind:	
3DS Requestor Dec Max Time:	

Check the front-end implementations for a no-script environment in the following pages:

- [no_script.html](#)
- [no_script_process.html](#)
- [no_script_poll_result.html](#)
- [no_script_results.html](#)

To support a no-script environment, the following endpoints are implemented in the back-end:

- `/noscript` and `/3ds-notify/noscript` endpoints in `MainController`
- `/v2/auth/init/noscript`, `/v2/auth/noscript`, `/v2/auth/result/noscript/poll`, and `/v2/auth/brw/result/noscript` endpoints in `AuthControllerV2`