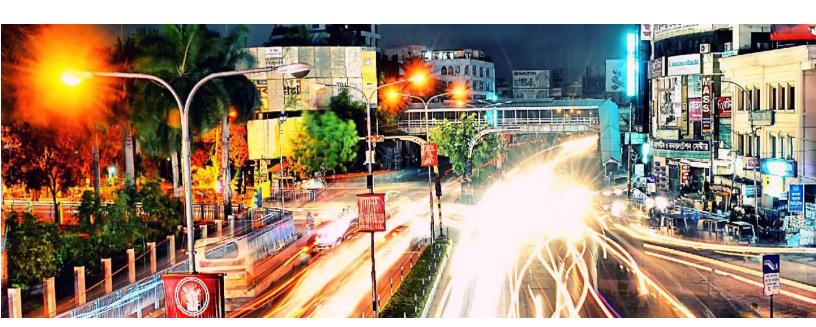
Cybersource REST Cartridge for Salesforce B2C Commerce





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1. Introduction

- **Description:** Cybersource, a Visa solution, is the only global, modular payment management platform built on secure Visa infrastructure with the payment reach and fraud insights of a massive \$500B+ global processing network. You can find out more about what Cybersource does here.
- Categories: Payment Processing, Fraud Detection, Address Validation, Tax Computation
- Version: 25.3.0
- Supports Storefront Reference Architecture (SFRA) v7.0.
- JavaScript Controllers Friendly: YES

Contact: globalpartnersolutionscs@visa.com

2. Cybersource SFRA Cartridge Architecture

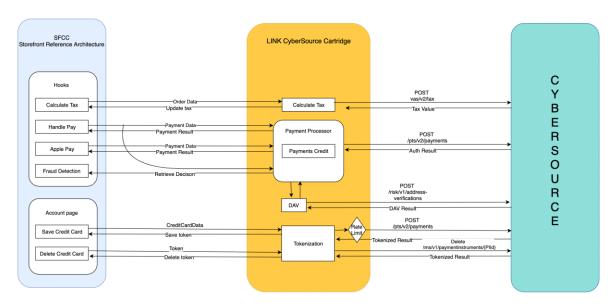


Fig 1: SFRA Cartridge Architecture

3. Install the Cartridge and Setup Workspace

3.1. Install the Cartridge

Cybersource's REST Cartridge for Salesforce B2C Commerce can be downloaded from the Salesforce AppExchange

https://appexchange.salesforce.com/appxListingDetail?listingId=a0N4V0000GbAG9UAN&tab=r.

3.2. Setup workspace

- Create a folder "Cybersource" in your workspace and place the cartridge (int_cybs_sfra and int_cybs_sfra_base) downloaded from Marketplace.
- If the project's base path is different from the one available in Cybersource's package.json , you will need to open the file '/package.json' and modify the paths.base value to point to your 'app_storefront_base' cartridge. This path is used by the JS and SCSS build scripts.
- If using VSCode install the extension Prophet Debugger <u>link</u> or any other SFCC extension and include below in dw.json ().

NOTE: If you are using different IDE, refer to the respective developer guide to setup the workspace.

3.3. Build and upload the code

Prerequisite: install node under "Cybersource" folder.

Install sgmf-scripts and copy-webpack-plugin

Install sgmf-scripts and copy-webpack-plugin with following command

Command: npm install sgmf-scripts && npm install copy-webpack-plugin

Compile the Code

Compile JS and SCSS with following command

Command: npm run compile:js && npm run compile:scss

Upload the code

Upload the code to Salesforce Commerce Cloud instance

Command: npm run uploadCartridge

4. Configure the Cartridge

Prerequisite

If you are new to Cybersource, and would like to start using Cybersource Cartridge quickly, begin by <u>signing</u> up for a Sandbox Account.

You will also need to create an <u>API Key and API Shared Secret Key</u> that you can use to authenticate requests to our sandbox server. Follow same steps to generate Production key and shared secret.

4.1. Setup Cartridge Path

To set up the cartridge path:

- In the Business Manager, go to Administration > Sites > Manage Sites > [yourSite] > Settings.
- For the Cartridges, enter int_cybs_sfra:int_cybs_sfra_base:app_storefront_base and select Apply.

4.2. Upload metadata

The Cybersource Cartridge contains metadata that needs to be imported.

- 1. Go to Cybersource/metadata/payments_metadata/sites/ folder.
- 2. Rename **yourSiteID** folder name with your site ID in Business Manager (this can be found by looking up **Administration->Sites->Manage Sites**).
- 3. Zip payments_metadata folder.
- 4. Go to **Administration->Site Development->Site Import & Export** and upload **payments_metadata.zip** file.
- 5. Import the uploaded zip file.

On successful import, it creates following metadata:

- Site Preferences (Cybersource_Core, Cybersource__DeliveryAddressVerification, Cybersource_DeviceFingerprint, Cybersource_FlexMicroform, Cybersource_PayerAuthentication, Cybersource_TaxConfiguration, Cybersource_Tokenization, Cybersource_DecisionManager, Cybersource_MLE)
- Service (PaymentHttpService)
- Payment Processor (Payments Credit)
- Payment Method
- Job (Payment: Decision Manager Order Update)

4.3. Cybersource Core (Required)

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/meta/Core.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to **Merchant Tools > Site Preferences > Custom Preferences > Cybersource Core** and set values for the following parameters:

| Field | Description |
|---------------------------------|---|
| Enable Cybersource Cartridge | Enable or disable Cybersource Cartridge. If disabled none of the Cybersource services are invoked |
| Cybersource MerchantID | Cybersource Merchant ID |
| Cybersource REST Keyld | Cybersource REST Key ID |

| Cybersource REST Secret Key | Cybersource REST Secret Key |
|-----------------------------|--|
| Developer ID | Unique identifier generated by Cybersource for System Integrator |
| CardTransactionType | Select Sale/Auth transaction type |
| CommerceIndicator | Select MOTO/Internet |

Table 1: Cybersource Core preferences

4.4. Services (Required)

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/meta/Payment-Services.xml" in Business Manager (Administration > Operations > Import & Export).

Step 2: Go to **Administration > Operations > Services** and click on the **Payment Credentials** of the service.

Step 3: Make sure the URL is appropriate.

| Environment | URL |
|-------------|---------------------------------|
| Test | https://apitest.cybersource.com |
| Production | https://api.cybersource.com |

Table 2: Service endpoints

4.5. Payment Processor (Required)

Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/sites/yourSiteID/payment-processors.xml" in Business Manager (Merchant Tools > Ordering > Import & Export).

5. Configure the Payment method

5.1. Payment Cards

In the Business Manager, go to Merchant Tools > Ordering > Payment Methods and select CREDIT_CARD. And in CREDIT_CARD details, double check if Payment Processor = "PAYMENTS_CREDIT".

The Cybersource Cartridge supports the following payment card capture methods:

- a. Microform v2
- b. Direct API

Please note that selecting Direct API will increase your PCI DSS scope

5.1.1 To Setup Microform v2

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/meta/FlexMicroform.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to **Merchant Tools > Site Preferences > Custom Preferences > Cybersource_FlexMicroform** and set values for the parameter:

| Field | Description | Value to Set |
|--|---|--|
| Enable Secure Acceptance - Flex Microform | Enable or Disable Cybersource Flex Microform Service | Yes |
| AllowedCardNetworks | Configure card types for Cybersource Flex Microform | VISA MASTER DISCOVER DINERSCLUB JCB MAESTRO AMEX CUP JCREW CARTESBANCAIRES ELO |

Table 3: Cybersource Microform Preference

5.1.2 To Setup Direct Cybersource Payment API

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/meta/FlexMicroform.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to **Merchant Tools > Site Preferences > Custom Preferences > Cybersource_FlexMicroform** and set the value for following parameter:

| Field | Description | Value to Set |
|---------------------------------|--|-----------------|
| Enable Secure Acceptance – Flex | Enable or Disable Cybersource Flex Microform | No |

| Microform | Service | |
|-----------|---------|---|
| | | 1 |

Table 4: Cybersource Microform Preference

5.1.3. Payer Authentication (3D Secure)

Prerequisite

If you wish to process card payments with Payer Authentication, please ensure your Cybersource account has been enabled for it. Please contact your Cybersource representative if you are unsure.

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/meta/PayerAuthentication.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to **Merchant Tools > Site Preferences > Custom Preferences > Cybersource_PayerAuthentication** and set values for the following parameters:

| Field | Description |
|-----------------------------|--|
| Enable Payer Authentication | Enable or Disable Payer Authentication service |

Table 5: Cybersource PayerAuthentication Preferences

Enforce Strong Consumer Authentication

When Payer Authentication is enabled, if a transaction gets declined with the reason as Strong Customer Authentication required, then another request will be sent from cartridge automatically for the same order and the customer will be 3DS challenged.

In case merchants would like the cardholder to be 3DS Challenged when saving a card, IsSCAEnabled setting can be updated to enable it for credit cards.

Note: The scaEnabled setting is applicable only if Payer Authentication is enabled.

Site Preferences:

Step 1: Upload Cybersource metadata to Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/sfra_meta/meta/PayerAuthentication.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to Merchant Tools > Site Preferences > Custom Preferences > Cybersource_PayerAuthentication and set values for the following parameters:

| Field | Description |
|--------------|---------------------------------------|
| IsSCAEnabled | Enable Strong Customer Authentication |

Table 6: Cybersource SCA Preference

Set the value for IsSCAEnabled to yes to use Strong Customer Authentication feature.

Decision Manager with Payer Authentication

Decision Manager plus Payer Authentication allows pre-authentication rules to be configured before authentication takes place, providing EMV® 3 3DS authentication and risk review from authentication to authorization.

Site Preferences:

Step 1: Upload Cybersource metadata to Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/meta/PayerAuthentication.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to Merchant Tools > Site Preferences > Custom Preferences > Cybersource_PayerAuthentication and set values for the following parameters:

| Field | Description |
|-----------------------------|--|
| Enable Payer Authentication | Enable or Disable Payer Authentication service |

Table 7.1: Cybersource PayerAuthentication Preferences

Step 2.1: Go to Merchant Tools > Site Preferences > Custom Preferences > Cybersource_DecisionManager and set values for the following parameters:

| Field | Description | |
|----------------------------------|--|--|
| Enable Decision Manager Services | Enable or Disable Decision Manager for Cybersource Cartridge | |

Table 7.2: Cybersource Decision Manager Preference

5.2. Apple Pay

5.2.1. Create a merchant identifier in Apple portal

A merchant identifier uniquely identifies you to Apple Pay as a merchant who is able to accept payments. You can use the same merchant identifier for multiple native and web apps. It never expires.

- Go to Apple portal : https://developer.apple.com
- In Certificates, Identifiers & Profiles, select Identifiers from the sidebar, then click the Add button (+) in the upper-left corner.
- Select Merchant IDs, then click Continue.
- Enter the merchant description and identifier name, then click Continue.
- Review the settings, then click Register.

5.2.2. Enrolling in Apple Pay in Cybersource

To enroll in Apple Pay:

- Log in to the Business Center:
 - Test: https://ebctest.cybersource.com/ebc2/
 - Live: https://ebc2.cybersource.com/ebc2/
- On the left navigation pane, click the Payment Configuration icon.
- Click **Digital Payment Solutions**. The Digital Payments page appears.
- Click **Configure**. The Apple Pay Registration panel opens.
- Enter your Apple Merchant ID. (Created in Step 1.4)
- Click Generate New CSR.
- To download your CSR, click the **Download** icon next to the key.
- Follow your browser's instructions to save and open the file.

5.2.3. Complete the enrollment process by submitting your CSR to Apple

Create a payment processing certificate: A payment processing certificate is associated with your merchant identifier and used to encrypt payment information. The payment processing certificate expires every 25

months. If the certificate is revoked, you can recreate it.

- In Certificates, Identifiers & Profiles, select Identifiers from the sidebar.
- Under Identifiers, select Merchant IDs using the filter in the top-right.
- On the right, select your merchant identifier. Note: If a banner appears at the top of the page saying that you need to accept an agreement, click the Review Agreement button and follow the instructions before continuing.
- Under Apple Pay Payment Processing Certificate, click Create Certificate.
- Click Choose File.
- In the dialog that appears, select the CSR file downloaded from Step 2.7, then click Choose.
- Click Continue.

5.2.4. Configure Apple Pay in SFCC Business Manager

Business Manager Configuration

- Go to: "Merchant Tools > Site Preferences > Apple pay.
- Check "Apple Pay Enabled?"
- Fill in the "Onboarding" form:
 - o Ensure "Apple Merchant ID" and "Apple Merchant Name" match settings in your Apple account.
 - o Ensure all other fields match your supported Cybersource settings.
 - o **Country Code:** Enter the country code for the locale of your site.
 - The country code is a two letter ISO 3166 country code (e.g. US).
 - o Merchant Capabilities: Check box for 3DS, leave other fields unchecked
 - Supported Networks: Select the types of payment you support:
 - Amex, MasterCard, and Visa are supported by Cybersource.
 - Required Shipping Address Fields: Select the fields that are required on the shipping form.
 Cybersource recommends Email, Name, Phone, and Postal Address
 - o Required Billing Address Fields: Select Name and Postal Address
- Fill in the "Storefront Injection" form:
 - o Selects where Apple Pay buttons should be displayed on your site.
- Fill in "Payment Integration" form:
 - Use Commerce Cloud Apple Pay Payment API? Checked
 - Payment Provider URL:

Test: https://apitest.cybersource.com/partner/demandware/payments/v1/authorizations
Productions: https://apitest.cybersource.com/partner/demandware/payments/v1/authorizations

- o API Version: v1
- Use Basic Authorization? Unchecked
- o Payment Provider User: Not Applicable
- Payment Provider Password: Not Applicable
- Use JWS? == Yes
- o JWS Private Key Alias: Merchant's .p12 Key Alias
 - The private key alias is created when a merchant uploads their .p12 key file (from Cybersource self-serve) to Commerce Cloud's Business Manager Module, Private Keys and Certificates(Administration > Operations > Private Keys and Certificates)
 - Download a p12 file from you Cybersource mid by following steps in <u>Create a p12 file.</u>
- Click "Submit".

5.2.5. Domain Registration in SFCC Business Manager

- Go to: "Merchant Tools > Site Preferences > Apple Pay.
- Under Domain Registration section
 - Click on Register Apple Sandbox under Apple Sandbox section to register SFCC to Apple Sandbox account.
 - Click on Register Apple Production under Apple Production section to register SFCC to Apple Production account.

5.2.6. Payment Processor

In the Business Manager, go to Merchant Tools > Ordering > Payment Methods and select DW_APPLE_PAY. And in DW_APPLE_PAY details, double check if Payment Processor = "PAYMENTS_CREDIT".

Site Preferences:

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/sfra_meta/meta/ApplePay.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to **Merchant Tools > Site Preferences > Custom Preferences > Apple Pay** and set values for the following parameters:

| Field | Description |
|-------------------------|-----------------------------------|
| ApplePayTransactionType | Select Sale/Auth transaction type |

Table 7: Cybersource Apple Pay Preference

5.3. Google Pay

5.3.1. Create custom preference for Google Pay

- Upload Cybersource metadata in Business Manager. If not follow "4.2: Upload metadata" or import "metadata/payment_metadata/meta/GooglePay.xml" in Business Manager (Administration > Site Development > Import & Export).
- Go to Merchant Tools > Site Preferences > Custom Preferences > Google Pay and set values for the following parameters:

| Field | Description |
|-----------------------------------|---|
| Enable Google Pay | Enable/Disable Google Pay on checkout page |
| Enable Google Pay on Mini Cart | Enable/Disable Google Pay on mini cart |
| Enable Google Pay on Cart | Enable/Disable Google Pay on cart page |
| Google Pay Merchant Id | Merchant Id required for Live Environments |
| Google Pay Environment | Environment details of Google Pay. Possible values are Test or Production |
| Google Pay Transaction Type | Select Sale/Auth transaction type |

Table 8: Cybersource Google Pay Preferences

5.3.2. Payment Processor

In the Business Manager, go to Merchant Tools > Ordering > Payment Methods and select DW_GOOGLE_PAY. And in DW_GOOGLE_PAY details, double check if Payment Processor = "PAYMENTS_CREDIT".

5.3.3. Request Production Access

If you want to use Google Pay in **LIVE Environment**, then navigate to this link https://pay.google.com/business/console/ to get Google Pay merchant Id.

Note: Please refer to Section 5.1.3 to configure Payer Authentication for Google Pay.

5.4. Click to Pay

5.4.1. Create custom preference for Click to Pay

- Upload Cybersource metadata in Business Manager. If not follow "4.2: Upload metadata" or import "metadata/payment_metadata/meta/VisaSRC.xml" in Business Manager (Administration > Site Development > Import & Export).
- Go to Merchant Tools > Site Preferences > Custom Preferences > Click to pay and set values for the following parameters:

| Field | Description |
|-------------------------------|---|
| Enable Click to Pay | Enable/Disable Enable Click to Pay on checkout page |
| Click to Pay Key | Click to Pay Key Id obtained through EBC Digital payments |
| True for production | Set to Yes for Production |
| Click to Pay Transaction Type | Select Sale/Auth transaction type |

Table 11: Cybersource Click to Pay Preferences

5.4.2. Payment Processor

In the Business Manager, go to **Merchant Tools > Ordering > Payment Methods** and select **CLICK TO PAY**. And in **CLICK_TO_PAY details**, double check if **Payment Processor = "PAYMENTS_VISA_SRC"**.

Note: Currently Click to Pay is only available in checkout view.

6. Configure Features

6.1. Token Management Service

Refer to this <u>link</u> to learn about Cybersource's Token Management service

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata"</u> or import "metadata/payment_metadata/meta/Tokenization.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to **Merchant Tools > Site Preferences > Custom Preferences > Cybersource_Tokenization** and set values for the following parameters:

| Field Name | Description |
|---------------------|--|
| Enable Tokenization | Enable or Disable the Tokenization Service saving Credit/Debit Card on |
| Services | "My Account" page |

| Enable limiting Saved Card | Enable or Disable limiting Saved Card on My Account page |
|-------------------------------|--|
| Saved Card Allowed | Number of Cards that can be added in a defined interval on My Account page |
| Reset Interval (in Hours) | Number of hours that saved card attempts are counted |

Table 12: Cybersource Tokenization Preferences

NOTE: If you want to utilize "save card to account" feature through "Payment flow/Checkout flow", make sure to set "Enable tokenization Services" to "Yes".

6.2. Network Tokens

A Network Token is a card scheme generated token, that represents customer card information for secure transactions that references a customer's actual PAN.

Your Cybersource Merchant ID needs to be enabled for Network Token's before you can use this service. Please contact your Cybersource representative to request enablement.

The Cybersource cartridge will subscribe to the Token Life Cycle web hook and make the necessary updates to the saved card details.

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payments_metadata/meta/Tokenization.xml". and "metadata/payments_metadata/meta/custom-objecttype-definitions.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to **Merchant Tools > Site Preferences > Custom Preferences > Cybersource_Tokenization** and set values for the following parameters:

| Field Name | Description |
|-----------------------|--|
| Services | Enable or Disable the Tokenization Service saving Credit/Debit Card on "My Account" page |
| Network Token Updates | Subscribe to Network Token life cycle updates |

Table 13: Cybersource Network Tokens Preference

Step 3: Go to **Merchant Tools > Custom objects > Custom Object Editor** and check if the custom object type "Network Tokens Webhook" exists without any object.

A custom object of this type would be created only if the Network Tokens webhook is subscribed.

NOTE: To utilize Network Tokens feature

- Make sure "Enable Tokenization Services" and "Network Token Updates" are set to yes.
- The Webhook URL needs to be added in the following path "Payment Configuration > Webhook Settings > Configure in the Business Centre and make sure its enabled.

6.3. Delivery Address Verification

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/meta/DeliveryAddressVerification.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to Merchant Tools > Site Preferences > Custom Preferences > Cybersource_DeliveryAddressVerification and set values for the parameter:

| Field | Description |
|--------------------------------------|---|
| Enable Delivery Address Verification | Enable or Disable Delivery Address Verification for |
| Services | Cybersource Cartridge |

Table 14: Cybersource Delivery Address Verification Preference

6.4. Tax Calculation

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/meta/TaxConfiguration.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to **Merchant Tools > Site Preferences > Custom Preferences > Cybersource_TaxConfiguration** and set values for the following parameters:

| Field | Description |
|--|---|
| Enable Tax calculation Services | Enable or disable Cybersource tax service for Cybersource Cartridge |
| List of nexus states | When your company has nexus in the U.S. or Canada, you might be required to collect sales tax or seller's use tax in those countries |
| List of nexus states to exclude | List of nexus states to exclude |
| Merchant's VAT Registration Number | A VAT seller registration number is required in order to calculate international taxes and might be required for some Canadian transactions. International/VAT calculation is supported in specific countries |
| Default Product Tax Code | Default tax code used when tax code is not set on a product |
| Purchase Order Acceptance City | Purchase order acceptance city |
| Purchase Order Acceptance State Code | Purchase Order Acceptance State Code. Use the State, Province, and Territory Codes for the United States and Canada |
| Purchase Order Acceptance zip code | Purchase Order Acceptance zip code |
| Purchase Order Acceptance Country Code | Purchase Order Acceptance Country Code. Use the two-character ISO Standard Country Codes |
| Purchase Order Origin City | Purchase Order Origin City |

| Purchase Order Origin State Code | Purchase Order Origin State Code. Use the <u>State, Province, and Territory</u> <u>Codes</u> for the United States and Canada |
|---------------------------------------|---|
| Purchase Order Origin Zip Code | Purchase Order Origin Zip Code |
| Purchase Order Origin Country Code | Purchase Order Origin Country Code. Use the two-character ISO Standard Country Codes |
| Ship From City | Ship From City |
| Ship From State Code | Ship From State Code |
| Ship From Zip Code | Ship From Zip Code |
| Ship From Country Code | Ship From Country Code |

Table 15: Cybersource Tax Configuration Preferences

6.5. Fraud Management Solutions

Refer to this <u>link</u> to learn about Cybersource's Decision Manager and Fraud Management Essentials. Both services use the same cartridge settings and fields, to access the service a retailer has signed up for with Cybersource.

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata"</u> or import "metadata/payment_metadata/meta/DecisionManager.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to **Merchant Tools > Site Preferences > Custom Preferences > Cybersource_DecisionManager** and set values for the following parameter:

| Field | Description |
|----------------------------------|--|
| Enable Decision Manager Services | Enable or Disable Decision Manager for Cybersource Cartridge |

Table 16: Cybersource Decision Manager Preference

Step 3: To enable **Decision Manager Order Update Job**: Decision Manager Order Update Job uses a REST API to retrieve order decisions from Cybersource and update the order confirmation status in SFCC.

To Integrate this job into your site, follow the below steps:

Step 3.1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/jobs.xml" in Business Manager (Administration > Operations > Import & Export).

Step 3.2: Open Business Manager. Go to **Administration > Operations > Jobs** and select **Payment: Decision Manager Order Update**. Make sure following values are filled in:

| Field | Description |
|----------------------------|---|
| ID | Identifier |
| Description | Description |
| ExecuteScriptModule.Module | int_cybs_sfra_base/cartridge/scripts/jobs/DMOrderStatusUp date.js |

| ExecuteScriptModule.FunctionName | orderStatusUpdate |
|--------------------------------------|--|
| ExecuteScriptModule.Transactional | Indicates if the script module's function requires transaction handling. |
| ExecuteScriptModule.TimeoutInSeconds | The timeout in seconds for the script module's function |

Table 17: Cybersource DM Order Update

Step 3.3: Go to **Merchant Tools > Site Preferences > Custom Preferences > Cybersource_DecisionManager** and set values for the following parameter:

| Field | Description | |
|---------------|---|--|
| · | Number of hours the job will look back for new decisions. CS does not | |
| Lookback time | support lookbacks over 24 hours. Do not set above 24. | |

Table 18: Cybersource Decision Manager Preference

6.6. Device FingerPrint

Device FingerPrint is a powerful feature of Decision Manager and Fraud Management Essentials It is always recommended to send a Device Fingerprint when using a Cybersource fraud management service.

Step 1: Upload Cybersource metadata in Business Manager. If not follow "<u>4.2: Upload metadata</u>" or import "metadata/payment_metadata/meta/DeviceFingerprint.xml" in Business Manager (Administration > Site Development > Import & Export).

Step 2: Go to **Merchant Tools > Site Preferences > Custom Preferences > Cybersource_DeviceFingerprint** and set values for the following parameters:

| Field | Description |
|-------------------------------------|---|
| Enable DeviceFingerprint Service | Enable or Disable the Device Fingerprint Service. |
| Organization Id | Organization ID for the device fingerprint check |
| Thread Matrix URL | Thread Matrix URL pointing to JS that generates and retrieves the fingerprint. |
| TTL (Time To Live) | Time, in milliseconds between generating a new fingerprint for any given customer session |

Table 19: Cybersource DeviceFingerprint Preferences

6.7. Capture Service

A single function is available to make capture requests. Please note that these functions are not available to use in the Salesforce B2C Commerce UI without customisation

httpCapturePayment(requestID, merchantRefCode, purchaseTotal, currency)

This function can be found in the script 'scripts/http/capture.js'. A working example of how to use this function can be found in the ServiceFrameworkTest-TestCaptureService controller. You will first get an instance of the capture.js object, and make the call as follows:

var captureObj = require("~/cartridge/scripts/http/capture.js");
var serviceResponse = captureObj.httpCapturePayment(requestID, merchantRefCode,

```
paymentTotal, currency);
```

The resulting serviceResponse object will contain the full response object generated by the request. The contents of this object will determine your logic in handling errors and successes. For detailed explanations of all possible fields and values, refer this <u>link</u>.

Capture Request Parameters

| Parameter Name | Description |
|-----------------|--|
| requestID | Transaction ID obtained from the initial Authorization |
| merchantRefCode | SFCC Order Number |
| purchaseTotal | Order Total |
| currency | Currency code (ex. 'USD') |

Table 20: Capture Request Parameters

6.8. Auth Reversal Service

A single function is available to make auth reversal requests. Please note that these functions are not available to use in the Salesforce B2C Commerce UI without customisation .

httpAuthReversal(requestID, merchantRefCode, amount, currency)

This function can be found in the script 'scripts/http/authReversal.js'. A working example of how to use this function can be found in the ServiceFrameworkTest-TestAuthReversal controller. You will first get an instance of the AuthReversal.js object, and make the call as follows:

var reversalObj = require("~/cartridge/scripts/http/authReversal.js");
var serviceResponse = reversalObj.httpAuthReversal(requestID, merchantRefCode,
paymentTotal, currency);

The resulting serviceResponse object will contain the full response object generated by the request. The contents of this object will determine your logic in handling errors and successes. For detailed explanations of all possible fields and values, refer this link

Authorization Reversal Request Parameter

| Parameter Name | Description | |
|-----------------|--|--|
| requestID | Transaction ID obtained from the initial Authorization | |
| merchantRefCode | SFCC Order Number | |
| amount | Order Total | |
| currency | Currency code (ex. 'USD') | |

Table 21: Authorization Reversal Request Parameter

6.9. Advanced Customization

The Cybersource SFRA cartridge has built-in custom hooks that can be utilized to customize request data being sent to each Service. This can be utilized to send additional custom data that the core cartridge cannot account for. For example, if you want to include Merchant Defined Data in your Credit Card Authorization Requests, you can use these hooks to achieve this.

The hooks are called in the 'scripts/http/capture.js' and 'scripts/http/AuthReversal.js' scripts. After a request for a particular service is built, but before it is sent to CS, a check for any code registering to the hook 'app.payment.modifyrequest' is done. If present, the hook will be called for that specific request. The request object is passed into the hook and the return value of the hook is sent to CS as the final request object. Through this process, you can inject your own data into the request object from custom code you write in a separate cartridge.

Implementation:

To customize request objects, register the hook 'app.payment.modifyrequest' in your cartridges 'hooks.json' file. An example would look like this, replacing the script path with your own script:

```
{
    "name": "app.payment.modifyrequest",
    "script": "./cartridge/scripts/hooks/modifyRequestExample"
}
```

You can copy the 'scripts/hooks/modifyRequestExample' script from this cartridge into your own to use as a template for extending and modifying service request objects. Note, every hook must return a valid request object for the given service. It is recommended that you reference the CybserSource documentation for details on the exact nature of any fields you wish to customize or add. The following hooks are available for you to define in this file:

Modify Request hooks

| Hook Name | Service Request to modify | |
|--------------|------------------------------------|--|
| AuthReversal | Credit Card Authorization Reversal | |
| Capture | Credit Card Capture | |

Table 22: Modify Request hooks

6.10. Message-Level Encryption (MLE)

Refer to this link to learn about Cybersource's MLE feature.

6.10.1. Upload meta

Upload Cybersource metadata in Business Manager. If not follow "4.2: Upload metadata" or import "metadata/payment_metadata/meta/MLE.xml" in Business Manager (Administration > Site Development > Import & Export).

6.10.2. Configure Custom preferences

Go to Merchant Tools > Site Preferences > Custom Preferences > Cybersource_MLE and set values for the following parameters according to documentation -> Cybersource for Salesforce B2C Commerce REST-Message-Level Encryption Guide.

| Field | Description |
|------------------------------------|--|
| Enable Message-Level Encryption | Enable or Disable Message-Level Encryption. |
| Alias of the Certificate | Alias of the "CyberSource_SJC_US" Certificate imported in "Private Keys and Certificates". |

| Certificate Serial Number | Serial Number of "CyberSource_SJC_US" certificate extracted from p12 file. |
|---------------------------|--|
| | |

Table 23: Cybersource MLE Preferences

6.10.3. Steps for managing P12 certificate

Please refer to Steps for managing P12 certificate section in Cybersource for Salesforce B2C Commerce REST-Message-Level Encryption Guide.pdf under cartridge documentation folder to create, extract and import the P12 certificate.

7. Test and Go Live

Test your integration, and configure your live account, so you can start processing live transactions.

Test your integration

Before you start accepting payments, test your integration in Test sandbox:

The sandbox simulates the live payment gateway. The sandbox never processes an actual payment. We do not submit sandbox transactions to financial institutions for processing. The sandbox environment is completely separate from the live production environment, and it requires separate credentials. If you use your production credentials in the sandbox or visa versa, you get a 401 HTTP error.

Sign up for a sandbox account if you have not yet.

Use our test card numbers to make test payments: > The following test credit card numbers work only in the sandbox. If no expiration date is provided, use any expiration date after today's date. If the card verification code is required and is not provided, use any 3-digit combination for Visa, Mastercard, Discover, Diners Club and JCB; use a 4-digit combination for American Express.

Test card numbers : Testing information | Cybersource Developer Center

Test card numbers for Network Tokens: Test Card Numbers

Register SFCC sandbox to Apple Sandbox Account.

- Go to: "Merchant Tools > Site Preferences > Apple pay.
- Under **Domain Registration** section
 - Click on Register Apple Sandbox under Apple Sandbox section for registering SFCC to Apple Sandbox account.

To manage your evaluation account, log in to the <u>Test Business Center</u> and do the following: - View test transactions. - Access administrator users and access privileges. - Create roles with predefined access permissions. - View reports.

Important: Cybersource recommends that you submit all banking information and required integration services in advance of going live. Doing so will speed up your merchant account configuration.

Configure your live account

Once you have the credentials for the live environment:

- Configure cartridge using your live account settings.
- Test your integration

8. Upgrade Steps

Upgrade from version 25.2.0 to 25.3.0

Please follow the below steps to upgrade your cartridge version from 25.2.0 to 25.3.0.

- Please download and install Cybersource REST Cartridge for B2C Commerce from Salesforce Commerce Cloud's marketplace https://appexchange.salesforce.com/listingDetail?listingId=a0N4V00000GbAG9UAN&tab=e.
- Upload metadata
- -> The Cybersource Cartridge contains metadata that needs to be imported.
- -> Go to **Cybersource/metadata/payments_metadata/sites/** folder.
 - -> Zip **payments_metadata** folder.
 - -> Go to Administration->Site Development->Site Import & Export and upload payments_metadata.zip file.
 - -> Import the uploaded zip file.
- -> To setup payer authentication for Google Pay, go to Merchant Tools > Site Preferences > Custom Preferences > PayerAuthentication and set values for the parameters.

| Field | Description |
|------------------------------|---|
| Cybersource_PayerAuthEnabled | Enable or Disable Payer Authentication service. |

9. Release Notes

Version 25.3.0 (May 2025)

- Added Payer Authentication support for Google Pay.
- Added multi-currency support for Google Pay

Bug Fix:

- Handled session variables in SCA flow.
- Removed encryption type from Microform v2 request.

Version 25.2.0 (March 2025)

New Feature

• Added Message-Level Encryption (MLE) feature.

Enhancement

Added support for additional card types in Microform v2.

Version 25.1.0 (January 2025)

New Feature

Upgraded microform v0.11 to v2.

Bug Fixes

- Added webhook subscription deletion if subscription is deleted at Cybersource end or Salesforce custom object.
- Handled undefined exception scenario for 3ds transactions.

Version 24.4.0 (September 2024)

- Added DMPA support.
- Upgraded to jQuery v3.7.0.

Version 24.3.0 (August 2024)

- Upgraded the cartridge to support SFRA v7.0.
- Added Commerce Indicator MOTO.

Version 24.2.1 (May 2024)

- · Checkmarx issues fixed.
- Device fingerprint bug fixed.

Version 24.2.0 (April 2024)

- Implemented Direct API integration for Payer Authentication with Payer Auth Setup and Device Data Collection.
- Enhanced SCA feature.
- Implemented Network Tokens feature.

Version 24.1.0 (February 2024)

- Upgraded the cartridge to support SFRA v6.3.
- Updated cartridge to make it compatible with Salesforce B2C Commerce Release 22.7.
- Added Strong Customer Authentication for Credit Card.
- Renamed Visa SRC to Click to Pay.
- Implemented Sale functionality for Credit Card, Google Pay, Click to Pay and Apple Pay.
- Updated flex script referring to from v0.11.0 to v0.11.
- Updated API header in Http Signature Authentication.

Version 21.1.0 (June 2021)

New Features

• Improved Payer authentication screen (modal).

Bug Fixes

- Added descriptive error messages on certain fail cases and invalid inputs.
- Reloading on final confirmation page does not result on failed authorization.

Version 20.2.0 (Feb 2021)

New Features

- Support Google Pay payment method.
- Support Visa SRC payment method.
- Improved security on "My Account" page by adding Microform approach to tokenize credit card.

Bug Fixes

- Improved security of keys by changing data type of password fields from "String" to "password".
- We added more security to exposed parameters of device fingerprint.

Version 20.1.1 (Nov 2020)

Bug Fixes

• Improved security on accessing and modifying sensitive fulfillment-related actions on an order (e.g., order acceptance, canceling etc.).

Version 20.1.0 (Aug 2020)

- Support Credit Card payment using Cybersource REST Payment API and Flex Microform v0.11.
- Support Apple Pay.
- Support PayerAuth/3D Secure using Cardinal Cruise API.
- Support Tokenization on "My Account" and "Payment Page".
- Support Delivery Address Verification service.
- Support Tax Service.
- Support Capture and Auth Reversal services.

10. Support

If you require support with this software, please contact <u>GlobalPartnerSolutionsCS@visa.com</u> and provide the following details:

- Summary of the issue.
- Steps to reproduce the issue.
- Cybersource B2C Commerce Plugin Version.
- Cybersource Merchant ID.
- Configuration screenshots: Please provide screenshots of Custom Preference Configurations.
- Log file and other relevant data: Download the logs from Administration -> Site Development ->
 Development Setup -> Log files.