



# SFRA payment cartridge integration

*int\_checkoutcom\_sfra | Version 20.1.0*



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## 1. Summary

[Checkout.com](#) is a software platform that has integrated 100% of the value chain to create payment infrastructures that truly make a difference. Checkout.com is authorised and regulated by the Financial Conduct Authority under the Electronic Money Regulations 2011 (reference number 900816) to issue electronic money and provide payment services.

The Checkout.com cartridges allows Salesforce Commerce Cloud (SCC) store owners to process payments through the [Checkout.com Payment Gateway](#).

This implementation guide describes how to integrate the Checkout.com SFRA payment cartridge into an SFCC reference application. The integration is cross-browser, cross-device compatible, and can accept online payments from all major credit cards.

The Checkout.com LINK cartridge package contains 3 folders:

1. **int\_checkoutcom** - Site Genesis integration for the [checkout.com](#) payment gateway
2. **int\_checkoutcom\_sfra** - SFRA integration for the [checkout.com](#) payment gateway
3. **bm\_checkoutcom** - BM integration for the [checkout.com](#) payment gateway

These integrations have been designed using Javascript Controllers and don't contain any deprecated Pipelines code. For a maximisation of the conversion rate, the buyer is not redirected to third party sites during the payment process. Consequently, the shop operator does not need a PCI DSS certification to use the solution.

In order to test or effectively process payments through the Checkout.com Payment Gateway, you will need to open an account. Please contact your Checkout.com account manager or send an email to [support@checkout.com](mailto:support@checkout.com) for more information.

## 2. Components Overview

### 2.1. Functional Overview

The Checkout.com SFRA cartridge for SFCC connects your online store with the Checkout.com gateway and automates all payment processes, delivering a comprehensive payment integration with simple usability and maximum performance.

- Consolidated expertise for all payment methods and services
- End-to-end automation of all payment processes
- Seamless integration into the SCC checkout process
- Central administration directly in the SCC backend
- No PCI DSS certification necessary for you as a merchant
- Fast time-to-market due to the use of scalable cloud technologies

The following features are available directly through the SCC Business Manager and the Hub, Checkout.com's payment management backend:

- Fully featured transaction management: handle authorisation, capture, void, full or partial refund, blacklisting and chargebacks
- Customer/Card holder details, cards and address management
- Integrated risk engine with handling of fraud prevention

Checkout.com's Site Genesis cartridge for SFCC allows shoppers to perform secure payments without leaving the store and gives store owners a full control over payments and customer management.

The payment workflow can be summarised into 3 steps:

- Display a payment form
- Submit the form, charge the customer for the total amount of the order, handle the response
- Display the order confirmation page or the cart with an error message in case of failure
-

Upon completion of a payment, detailed information about the order and the corresponding transactions are available in the order details in the SFCC Business Manager.

## **2.2. Use Cases**

There is currently a single use case for this cartridge: the shopper is using one of the Checkout.com payment methods to complete a purchase on an SFCC website:

1. On the billing checkout step, a payment form is displayed
2. The shopper provides payment details and places an order
3. In case of payment success, the shopper is redirected to the order confirmation page
4. In case of payment failure, the shopper is redirected to the cart and can try again

Please see section **5.3 Storefront functionality** for images of the payment process.

## **2.3. Limitations, Constraints**

1. The Checkout.com SFRA cartridge integration doesn't support multi-shipping and subscriptions.
2. The Checkout.com SFRA payment form is not compatible with the default Site Genesis credit card form. The default Site Genesis should be disabled when the Checkout.com payment form is enabled.

## **2.4. Compatibility**

Available since SFRA v5.0

Compatible with SFRA v5.0 and above

Cartridge developed on SFRA 5.0

## 2.5. Privacy, Payment

This integration requires access to the following customer data elements:

- Card Details
- Billing Address
- Shipping Address
- Order Details
- Customer Profile
- Some custom properties of Customer Payment Instruments.

## 3. Implementation Guide

### 3.1. Setup

The Checkout.com SFRA integration is contained in the storefront cartridge **int\_checkoutcom\_sfra**. This single cartridge contains all the payment processor integration functionalities. The integration is compatible with storefronts based on Javascript Controllers.

The **int\_checkoutcom\_sfra** cartridge folder contains the following files:

#### **CONTROLLERS & PROCESSORS**

- controllers/CKOMain.js
- controllers/CKOKlarna.js
- controllers/CKOSepa.js
- scripts/payment/processor/CHECKOUTCOM\_APM.js
- scripts/payment/processor/CHECKOUTCOM\_APPLE\_PAY.js
- scripts/payment/processor/CHECKOUTCOM\_CARD.js
- scripts/payment/processor/CHECKOUTCOM\_GOOGLE\_PAY.js

## **FORMS**

- forms/default/alternativePaymentForm.xml
- forms/default/applePayForm.xml
- forms/default/cardPaymentForm.xml
- forms/default/googlePayForm.xml
- forms/default/sepaForm.xml

## **HELPERS**

- scripts/helpers/apmHelper.js
- scripts/helpers/applePayHelper.js
- scripts/helpers/cardHelper.js
- scripts/helpers/ckoHelper.js
- scripts/helpers/googlePayHelper.js

## **STATIC FILES**

- static/default/css/apm.css
- static/default/css/applepay.css
- static/default/css/googlepay.css
- static/default/js/apm.js
- static/default/js/applepay.js
- static/default/js/cardPayment.js
- static/default/js/checkoutcom.js
- static/default/js/cleave.js
- static/default/js/googlepay.js

## TEMPLATE FILES

- templates/custom/ajax/output.isml
- templates/custom/common/response/3DSecure.isml
- templates/custom/common/response/failed.isml
- templates/mandate/OrderMandate.isml
- templates/redirects/3DSecure.isml
- templates/redirects/apm.isml
- templates/redirects/failed.isml
- templates/redirects/sepaMandate.isml
- templates/walletPayments/applePayForm.isml
- templates/walletPayments/googlePayForm.isml
- templates/ckoPayments.isml
- templates/sepaform.isml

## MISCELLANEOUS

- int\_checkoutcom\_sfra.properties
- scripts/hooks.json
- scripts/config/ckoApmConfig.js
- scripts/config/ckoApmFilterConfig.js
- scripts/config/ckoCurrencyConfig.js

The **int\_checkoutcom\_sfra** Checkout.com SFRA cartridge is used for both testing (sandbox mode) and production (live mode). Once the cartridge installed, a parameter in the custom preferences of the SFCC Business Manager will allow you to set the running mode according to your needs.



## 3.2. Configuration

The steps required to enable the Checkout.com SFRA cartridge on your website are as described below. The following assumes you have a sandbox with a clean and functional Site Genesis site:

1. Download the **int\_checkoutcom\_sfra** cartridge from the LINK Marketplace.
2. Upload **int\_checkoutcom\_sfra** cartridge to your server, using a tool like UX Studio, Webdav, or the sgml-scripts based on Node.js. Apply the standard flow used to upload cartridges to your environment.
3. In the Business Manager, go to **Administration > Sites > Manage Sites**

```
int_checkoutcom_sfra:plugin_cartridge_merge:plugin_instorepickup:plugin_wishlists:plugin_giftregistr
```

In your target sites's settings, add **int\_checkoutcom\_sfra** to the cartridge path.

4. Go to **Administration > Site Development > Site Import & Export** to import the XML files available in the **metadata** folder.

[Administration](#) > [Site Development](#) > [Site Import & Export](#)

### Site Import & Export

This page allows you to export the current configuration of your organization including all of its sites. To download an archive, just click its file name.

#### Import

Upload Archive:

☒ Local ☐ Remote

Choose File no file selected

Select	Name ▲	Location	File Size	Last Modified
<input type="radio"/>	SiteGenesis Demo Site			

#### Export

Provide a name for the export archive, select the units you want to export, and click Export. By default, export files are saved in the local export directory and are accessible to the current instance only. If the file needs to be shared by multiple instances (e.g., Production, Sandbox, Development) save it in the global export directory using the respective check box. Fields with a red asterisk (\*) are mandatory.

Once in the Site Import section, follow the steps below to import the metadata folder:

- Open a file browser (e.g. Windows Explorer in Windows) and locate the metadata folder of the cartridge. Step down the folder hierarchy until you are in the subfolder "sites". Re-name the contained folder "SiteGenesisGlobal" to the name of the site for which you want to import **int\_checkoutcom\_sfra** settings, payment methods and services.

- Navigate back to the project's root folder and create a zip **metadata.zip** out of the folder metadata.
- Login to Business Manager and go to **Administration > Site Development > Site Import & Export**
- Go to the section "Upload archive". Choose "local" and click on the Browse button
- Navigate in the file system, select the **metadata.zip** then click on "Open" and upload the zip file.
- Check the import status in the Status section.

After the import has been completed successfully, all required Checkout.com data will be available globally and for the selected sites.

### 3.3. External Interfaces

The Checkout.com service endpoints are the external interface that this integration connects to. The documentation for the web service requests and responses can be found in the **charge with full card** section of the [Checkout.com documentation](#).

### 3.4. Firewall Requirements

There are no specific firewall requirements.

### 3.5. Testing

In order to test the payment workflow in sandbox mode, Checkout.com provides a set of card numbers allowing to simulate multiple payment cases.

Use any future expiry date (mm/yy) with these test cards.

CARD	NUMBER	CVV
Visa	4242424242424242	100
Visa	4543474002249996	956
MasterCard	5436031030606378	257
MasterCard	2223000010479399	299
MasterCard	5199992312641465	010
AMEX	345678901234564	1051
AMEX	378282246310005	1000
Diners Club	30123456789019	257
JCB	3530111333300000	100
Discover	6011111111111117	100

## **4. Operations, Maintenance**

### **4.1. Data Storage**

No custom objects are created by this cartridge.

### **4.2. Availability**

The Checkout.com payment gateway is expected to have continuous availability. The Checkout.com Payment Gateway API provides a 99.99% uptime SLA.

### **4.3. Translation**

This Checkout.com cartridge is provided with the English language by default. It's however possible to add custom translations for any language, using the translation files available in the resources folder.

### **4.4. Support**

For questions regarding an account, contact your Checkout.com account manager or send an email to [support@checkout.com](mailto:support@checkout.com).

## 5. User Guide

### 5.1. Roles, Responsibilities

There are no recurring tasks to be perform in order to run the Checkout.com SFRA cartridge integration.

### 5.2. Business Manager

The configuration parameters of the Checkout.com SFRA cartridge are available in: **Merchant Tools > Site Preferences > Custom Preferences.**

The following configuration screens are available:

#### 1. CKO [1] Sandbox Keys

The Checkout.com sandbox API credentials. A private key, a public key and a private shared key.

These credentials allow your online store to connect and communicate with the sandbox/test payment gateway.

They will be available in your Checkout.com account once it's been opened by your Account Manager. Please see the Contact section for more information on how to contact Checkout.com.

The screenshot shows a web interface for configuring Sandbox Keys. At the top, there is a dropdown menu labeled 'Instance Type' with 'Sandbox' selected. Below this is a search bar with the placeholder text 'Search by IDs...' and a magnifying glass icon. To the right of the search bar is a dropdown menu showing '1-3' and 'of 3'. The main content area is a table with three columns: 'Name', 'Value', and 'Default Value'. The table contains three rows of data:

Name	Value	Default Value
Public key*	pk_test_4789efbe-aadc-43f9-b2f8-5f6e65bbec20	
	Public key provided by Checkout.com	
Private key*	sk_test_d6f8e865-3ba2-4ec7-91cc-ae6798e004aa	
	Private key provided by Checkout.com	
Private shared key*	86585c4d-efad-4941-809e-1570626b0bfd	
	Private shared key provided by Checkout.com	

Each row has an 'Edit Across Sites' link to its right.

#### 2. CKO [2] Live Keys

The Checkout.com live API credentials. A private key, a public key and a private shared key.

These credentials allow your online store to connect and communicate with the live/production payment gateway.

They will be available in your Checkout.com account once it's been opened by your Account Manager. Please see the Contact section for more information on how to contact Checkout.com.

Instance Type  
Sandbox

Search by IDs...

1-3 of 3

Name	Value	Default Value
Public key*	<input type="text" value="pk_test_4789efbe-aadc-43f9-b2f8-5f6e65bbec20"/>	<a href="#">Edit Across Sites</a>
	Public key provided by Checkout.com	
Private key*	<input type="text" value="sk_test_d6f8e865-3ba2-4ec7-91cc-ae6798e004aa"/>	<a href="#">Edit Across Sites</a>
	Private key provided by Checkout.com	
Private shared key*	<input type="text" value="86585c4d-efad-4941-809e-1570626b0bfd"/>	<a href="#">Edit Across Sites</a>
	Private shared key provided by Checkout.com	

### 3. CKO [3] Business Details

The legal address and billing descriptors for your online store.

### 4. CKO [4] Cartridge Settings

The Checkout.com SFRA cartridge settings. These parameter are required for the Site Genesis integration only, in order to provide the names of you custom storefront controllers and storefront core paths:

- **Storefront core folder**

The name of the storefront core folder. Used by the cartridge to determine a path for several assets included in the folder.

- **Storefront controller folder**

The name of the storefront controller folder. Used by the cartridge to determine a path for several assets included in the folder.

## 5. CKO [5] Payment Settings

The Checkout.com gateway global payment settings and card payment settings. The following parameters are available.

- **Enable**

Enables the Checkout.com credit card form. This credit card form is not compatible with the default Site Genesis credit card form. Please disable the default Site Genesis credit card form when enabling the Checkout.com credit card form.

- **Enable debug mode**

When the debug mode is enabled, the cartridge will log all gateway response in the log files of your website.

- **3D Secure**

Should 3D Secure be active

- **Attempt Non 3D Secure**

In case of failure of a 3D secure check, should the gateway try to fallback to a regular transaction without 3D Secure check.

- **Auto capture**

After authorisation, should the transaction be captured immediately or with a delay.

- **Auto capture time**

An integer or decimal number specifying how long after the authorisation the capture should happen.

Time provided in minutes. Ex: A provided time of 0.2 minutes corresponds to 12 seconds between the initial card authorisation and the capture.

It's recommended to avoid setting the auto capture time to 0, in order to avoid collision between the authorisation confirmation and the capture confirmation.

## 6. CKO [6] APM Settings

The Checkout.com Alternative Payment Methods settings.

## 7. CKO [7] Google Pay Settings

The Checkout.com Google Pay payment method settings.

## 8. CKO [8] Apple Pay Settings

The Checkout.com Apple Pay payment method settings.

### 5.3. Storefront Functionality

Once enabled, the Checkout.com SFRA integration will add a new functionality to your Salesforce Commerce Cloud store.

The Checkout.com Card payments, Apple Pay payments, Google Pay payments and Alternative Payment methods will show as payment options on the billing page.

Checkout.com Card

Saved cards

Checkout.com APM

Checkout.com Google Pay

\*Card Number

4242 4242 4242 4242

\*Expiration Month

07

\*Expiration Year

2028

\*Security Code

100


☒ Save Card to Account



After having chosen a payment option and provided payment details, the shopper can proceed to the order review page.

Clicking on the “Place Order” button will send a charge request to the Checkout.com payment server, without having to redirect the shopper.

In case of successful payment, the shopper will be redirected to the order confirmation page.



Thank You

Thank you for your order.

You will receive an email confirmation shortly at test@test.com

Receipt	
Order Number:	00045072
Order Date:	24/06/2020
Shipping Address:	
David Fiaty	
105 A Keslake Road	
London, London NW6 6DH	
07400925171	
Shipping Method:	
Ground ( 7-10 Business Days )	£5.99
Billing Address:	
David Fiaty	
105 A Keslake Road	
London, London NW6 6DH	

## 6. Known Issues

No known issues at this time.