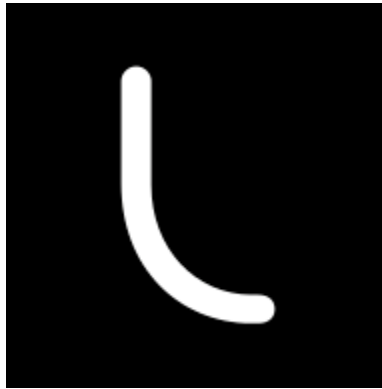


LUNU INTEGRATION DOCUMENTATION

SFRA v22.1.0



Summary

1. Prerequisites
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1. Prerequisites

- Salesforce B2C Commerce v.21.X
- An implementation of SFRA v.6
- Wallet for testing
- Environments
 - **testing.lunu.io** - sandbox testing server
 - **alpha.lunu.io** - production server

2. Lunu payment

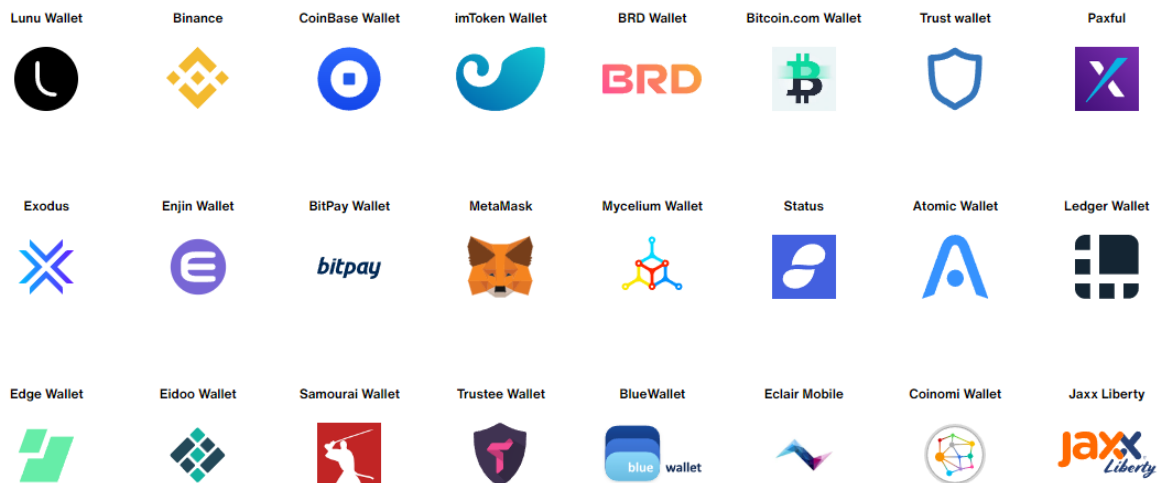
Lunu represents a crypto payment gateway that functions with any software wallet that recognizes or supports the input of a cryptocurrency address and transaction amount. Lunu uses the EIP-67 format of generating QR-Codes for Ethereum and BIP-21 for Bitcoin.

Failover/Recovery Process:

In case of failure, please contact: support@lunu.io or go to: <https://support.lunu.io/>
Provide as much information as possible, and make sure to check the logs.
The FAQ for Lunu is located at: <https://faq.lunu.io/>

Recommended wallets:

The full list can be found here: <https://lunu.io/recommended-wallets>




Supported countries:


As Lunu is a crypto payment service, there should be no restrictions on locales for payment. However, some Lunu products and services are not supported in every country. The list of supported countries is growing, and the plans for the supported country expansions can be found here: <https://lunu.io/countries>

 Austria


 Estonia

 Finland

 France


 Greece


 Italy

 Latvia

 Lithuania

 Malta


 Netherlands

 Slovenia

 Spain

Coming soon

 Andorra


 Australia


 Belgium

 Germany

 Japan


 Korea

 Luxembourg

 Monaco

 Portugal

 Slovakia

 United Kingdom

 USA

3. Supported coins

The list can be found here: <https://lunu.io/coins>

Bitcoin (BTC)
Networks: BTC, LNX



Ethereum (ETH)
Networks: ETH



USDT
Networks: ETH, BSC, TRX



USDC
Networks: ETH, BSC



BNB
Networks: BSC



Tron (TRX)
Networks: TRX



Ripple (XRP)
Networks: XRP



4. Install the cartridge

Lunupayment provides a LINK cartridge to integrate with Salesforce Commerce Cloud (SFCC). This cartridge enables the Lunu payment service for Salesforce Commerce Cloud SFRA.

1. Open the provided LINK_lunupayment.zip package
2. Extract the LINK_lunupayment folder which contains two folders with the following cartridges:
 - a. int_lunupayment
 - b. Int_lunupayment_sfra
 - c. bm_lunupayment
3. Add int_lunupayment, int_lunupayment_sfra and bm_lunupayment cartridges into your SFRA's code
4. Upload all cartridges into your SFRA sandbox

5. Setup cartridge path

1. Select Administration > Sites > Manage Sites
2. Open the site where you like to install the cartridge and select "Settings" tab
3. Add int_lunupayment_sfra:int_lunupayment followed by a colon the Cartridges textbox.
4. Click Apply

Sandbox - zzqg

RefArch

Merchant Tools Administration Storefront Toolkit

RefArch - Settings

Click **Apply** to save the details. Click **Reset** to revert to the last saved state.

Instance Type: Sandbox/Development

Deprecated. The preferred way of configuring HTTP and HTTPS hostnames is by using new features of the site aliases configuration ("SEO > Aliases Configuration"). The HTTP/HTTPS hostname values set in this section will be used if no hostnames are defined by aliases configuration and are intended only to support an older configuration style.

HTTP Hostname:

HTTPS Hostname:

Instance Type: All

Cartridges:

Effective Cartridge Path:

- int_lunupayment_sfra
- int_lunupayment
- app_storefront_base
- plugin_apple_pay
- plugin_facebook
- plugin_payments
- plugin_pinterest_commerce
- plugin_web_payments
- bc_content
- core

Apply Reset

[Back to List](#)

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Besides setting these cartridges, add bm_lunupayment cartridges to to BM path.

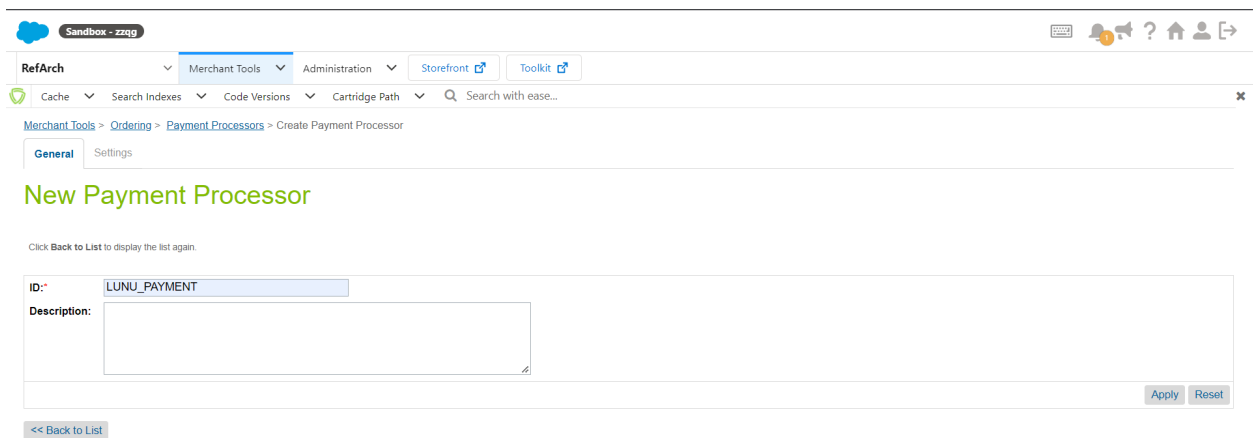
6. Import metadata

1. Select Administration > Site Development > Site Import & Export

2. In the File section, click Upload and select the zipped folder "metadata"
3. When mentioned folder is successfully uploaded, select it and click Import button
4. Make sure the import process was successful

7. Setup payment method

1. Select Merchant Tools > Ordering > Payment Processors
2. Click New to create a new payment processor with name: LUNU_PAYMENT
3. Click Apply



The screenshot shows the Salesforce RefArch interface. At the top, there's a navigation bar with 'RefArch' and several dropdown menus: 'Merchant Tools', 'Administration', 'Storefront', and 'Toolkit'. Below this is a search bar with the text 'Search with ease...'. The main content area is titled 'New Payment Processor' and has two tabs: 'General' and 'Settings'. The 'General' tab is active. It contains a form with two fields: 'ID:' with the value 'LUNU_PAYMENT' and 'Description:' with an empty text area. At the bottom right of the form are 'Apply' and 'Reset' buttons. At the bottom left of the form is a '<< Back to List' button. The footer of the page contains copyright information and system details.

Since we used Site Import and Export for importing necessary data, payment method should be already created.

8. Web Services

Same goes for Web services. Because of the way we imported necessary files, services should be already in place. Example of service credentials:

Sandbox - zzzgg

RefArch

Merchant Tools

Administration

Storefront

Toolkit

CacheSearch IndexesCode VersionsCartridge PathSearch with ease...

Administration > Operations > Services > Service Credentials > http.lunupayment.cred - Details

http.lunupayment.cred

Fields with a red asterisk (*) are mandatory. Click **Apply** to save the details. Click **Reset** to revert to the last saved state.
These credentials are used by 1 service.

Name*

http.lunupayment.cred

URL:

https://alpha.lunu.io/api/v1/

User:

Password:

ApplyReset

<< Back to List

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Example of service profile:

Sandbox - zzzgg

RefArch

Merchant Tools

Administration

Storefront

Toolkit

CacheSearch IndexesCode VersionsCartridge PathSearch with ease...

Administration > Operations > Services > Service Profiles > http.lunupayment.profile - Details

http.lunupayment.profile

Fields with a red asterisk (*) are mandatory. Click **Apply** to save the details. Click **Reset** to revert to the last saved state.
This profile is used by 1 service.

Name*

http.lunupayment.profile

Connection Timeout (ms):

15,000

Enable Circuit Breaker:

☐

Max Circuit Breaker Calls:

1,000

Circuit Breaker Interval (ms):

100,000

Enable Rate Limit:

☐

Max Rate Limit Calls:

0

Rate Limit Interval (ms):

0

ApplyReset

<< Back to List

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RefArch Time Zone: Coordinated Universal Time|Instance Time Zone: Eastern Daylight Time|Version: 22.4 Last Updated: Mar 28, 2022 (Compatibility Mode: 21.7)

And lastly example of the actual service:

Fields with a red asterisk (*) are mandatory. Click **Apply** to save the details. Click **Reset** to revert to the last saved state.

Name: LunuPayment

Type: HTTP

Enabled: ☒

Service Mode: Live

Log Name Prefix:

Communication Log Enabled: ☐

Force PRD Behavior in Non-PRD Environments: ☒

Profile: http.lunupayment.profile

Credentials: http.lunupayment.cred

Buttons: Apply, Reset

Footer: © 2022 salesforce.com, inc. All Rights Reserved. RefArch Time Zone: Coordinated Universal Time | Instance Time Zone: Eastern Daylight Time | Version: 22.4 Last Updated: Mar 28, 2022 (Compatibility Mode: 21.7)

9. Setup Jobs

A job is created in order to process Lunu payment notifications and clear the processed ones. Please configure the job as described in jobs.xml. Please keep in mind that scheduling can be changed according to business requirements and depending on how quickly Lunu processes the payments. In the picture below you can see how the job is configured

Buttons: Run Now

Scope: LunuPayment

processNotifications

clearNotifications

Footer: © 2022 salesforce.com, inc. All Rights Reserved. RefArch Time Zone: Coordinated Universal Time | Instance Time Zone: Eastern Daylight Time | Version: 22.4 Last Updated: Mar 28, 2022 (Compatibility Mode: 21.7)

10. Setup Site Preferences

When it comes to custom preferences, in order to make Lunu payment work we use only a couple of them. We need:

- LunuAppID
- LunuSecretKey
- LunuWidgetURL

Lunu provides the LunuAppID and LunuSecretKey (<https://console.lunu.io>), whereas the LunuWidgetURL should remain unchanged.

The screenshot shows the Salesforce RefArch Merchant Tools interface for configuring the Lunu Payment cartridge. The top navigation bar includes 'RefArch', 'Merchant Tools', 'Administration', 'Storefront', and 'Toolkit'. Below this, there are tabs for 'Cache', 'Search Indexes', 'Code Versions', 'Cartridge Path', and a search bar. The main content area is titled 'Lunu Payment' and includes buttons for 'Cancel', 'Apply to Other Sites', and 'Save'. A dropdown menu for 'Instance Type' is set to 'Sandbox'. Below this is a search bar for 'Search by ID'. A table displays the configuration details for the Lunu Payment cartridge, including the App ID, Secret Key, and Lunu Widget URL. The table has columns for 'Name', 'Value', and 'Default Value'. The 'App ID' is '8ce43c7a-2143-467c-b8b5-fa748c598ddd'. The 'Secret Key' is 'f1819284-031e-42ad-8832-87c0f1145696'. The 'Lunu Widget URL' is 'https://widget.lunu.io/(environment)/#/?action=select&cancel={cancelURL}&'. The bottom of the page shows the copyright notice '© 2022 salesforce.com, inc. All Rights Reserved' and the version information 'RefArch Time Zone: Coordinated Universal Time | Instance Time Zone: Eastern Daylight Time | Version: 22.4 Last Updated: Mar 28, 2022 (Compatibility Mode: 21.7)'.

Name	Value	Default Value
App ID (app_id) (String)	8ce43c7a-2143-467c-b8b5-fa748c598ddd	
Secret Key (secret_key) (String)	f1819284-031e-42ad-8832-87c0f1145696	
Lunu Widget URL (lunuWidgetURL) (String)	https://widget.lunu.io/(environment)/#/?action=select&cancel={cancelURL}&	https://widget.lunu.io/(environment)/#/?a...
Lunu Widget URL	Lunu Widget URL	

11. SFRA code changes

11.1. Template changes

According to the merchant's customizations, the LINK_lunupayment cartridge requires to update your **paymentOptionsContent.isml**

```
<isloop items="{dict.order.billing.payment.applicablePaymentMethods}" var="paymentOption">
  <isif condition="{paymentOption.ID === 'CREDIT_CARD'}">
    <isinclude template="checkout/billing/paymentOptions/creditCardContent" />
  <elseif condition="{paymentOption.ID === 'LUNU'}">
    <isinclude template="checkout/billing/paymentOptions/lunuPaymentContent" />
  </isif>
</isloop>
```

According to the merchant's customizations, the LINK_lunupayment cartridge requires to update your **paymentOptionsSummary.isml**

```

<div class="payment-details">
  <isloop items="{pdict.order.billing.payment.selectedPaymentInstruments}" var="payment">
    <isif condition="{payment.paymentMethod === 'CREDIT_CARD'}">
      <include template="checkout/billing/paymentOptions/creditCardSummary" />
    <elseif condition="{payment.paymentMethod === 'LUNU'}">
      <include template="checkout/billing/paymentOptions/lunuPaymentSummary" />
    </isif>
  </isloop>
</div>

```

According to the merchant's customizations, the LINK_lunupayment cartridge requires to update your **paymentOptionsTab.isml**

```

<isloop items="{pdict.order.billing.payment.applicablePaymentMethods}" var="paymentOption">
  <isif condition="{paymentOption.ID === 'CREDIT_CARD'}">
    <include template="checkout/billing/paymentOptions/creditCardTab" />
  <elseif condition="{paymentOption.ID === 'LUNU'}">
    <include template="checkout/billing/paymentOptions/lunuPaymentTab" />
  </isif>
</isloop>

```

11.2. Controller changes

Controllers changed in SFRA:

- CheckoutServices-PlaceOrder - Extended to check session for current paymentMethod, if that paymentMethod is LUNU, we are getting confirmationToken, after which we are also getting widget URL from custom preference we imported earlier. When everything is in place properly we enrich widget URL with necessary success and fail URLs, those URLs will handle two potential states after redirection back to our site.
- Order-Confirm - Replaced to fetch orderNo and orderToken from the request form or querystring parameters.

It is important to mention that the processNotification job step is updated to fill in all needs required after paying with the Lunu widget, meaning setting appropriate statuses or orders.

12. Custom Objects

The payment status for Lunu can not be verified during the payment itself. The “lunuPaymentNotification” custom object is used for storing responses that Lunu sends every time the payment status is changed on their server.

The notifications are identified by a transaction ID, which is contained within a response from Lunu web service during payment creation. If a notification with the same ID already exists, the notification will be updated with new data.

A job is used to process the notifications, and only if the notification’s status is “paid” (and the notificationStatus is “PENDING”), the notification is processed. Once processed, the notifications are removed on the next step of the job which removes them. The rate at which the notifications are processed can be configured in the job through scheduling.

Retention time for the notifications is 3 days, which is based on experience with other 3rd party payment providers and best practices.

The notification is created with every Lunu payment, only if the Lunu payment status is “awaiting_payment_confirmation” or “paid”. For other statuses that indicate a failed, expired or canceled payment, the notification is not created, and the basket is reopened, if possible. As discussed, the notification with the same transaction ID will only be updated with new data, if the status transitions from “awaiting_payment_confirmation” to “paid”, so the rate of creating new notifications has been decreased. That means that a notification will be created per order (only those which use Lunu for payment).

13. Integration tests

In order to test the integration, a test for placing an order is included into the repository. It covers the whole checkout process with the Lunu payment method selected. Before the test is executed, the base url should be set to the correct instance in file test/integration/it.config.js. Correct format is given in the file.