Installation Guide for Novalnet

Salesforce B2C Commerce Cloud Cartridge

Version	Date	Remarks
1.2.0	24.07.2024	**[New]** Implemented Zero amount booking for Credit Card and Direct Debit SEPA

👉For previous version changelog, go to

https://github.com/Novalnet-AG/Salesforce-b2c-Commerce-Cloud-by-Novalnet/blob/master/changelog.txt

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1   QUICK SETUP

This guide describes the quick installation procedure of Novalnet Payment Cartridge (this guide comes along with the cartridge), to integrate it into your shop system and to start accepting payments worldwide. For this integration, a Novalnet merchant account is needed to accept Novalnet payments, so please make sure that you have received your merchant account details from our sales team. If not, drop a mail to sales@novalnet.de

This Novalnet payment cartridge version (1.2.0) supports the given versions of Salesforce Commerce cloud in the following locale: EN & DE

salesforce commerce cloud	Storefront Reference Architecture
20.10 - 24.6	5.0.1 - 7.0.0

To get started:

1. Log in to the Novalnet Admin Portal with your merchant account details (user credentials).
2. Log in to your Salesforce commerce cloud shop system.
3. Make sure that you have extracted the payment Cartridge package from the zip file you have received. If you have received only the installation guide without the payment module package (zip file), please send us a mail to technic@novalnet.de with your merchant ID.

1.1 Cartridge Installation

To install the Novalnet payment cartridge, follow the steps below.

Step 1: Extract the **salesforce-b2c-commerce-cloud-by-novalnet.zip** file, copy the extracted folder **"salesforce-b2c-commerce-cloud-by-novalnet"** and paste it into the top-level project folder in which the repositories of the SFRA base cartridge and all required plugins, libraries, and any other LINK cartridges are cloned.
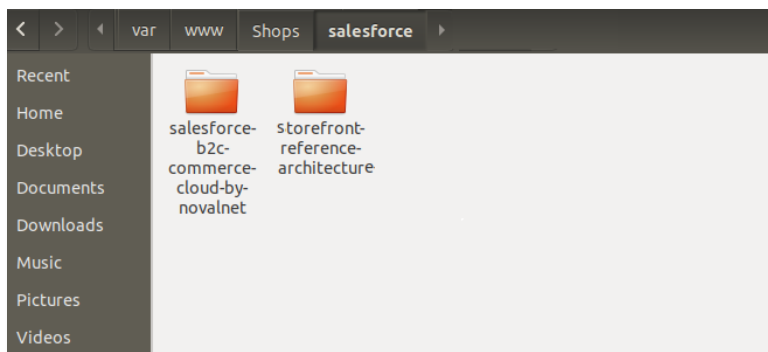

Figure 1

Step 2: Go to the **salesforce-b2c-commerce-cloud-by-novalnet** folder and enter your **hostname, username, password, code-version** in the **dw.json file**.


```
{
    "hostname": "yoursandbox-inside-your-realm.demandware.net",
    "username": "yourusername",
    "password": "yourpwd",
    "code-version": "version1"
}
```

Figure 2

Step 3: Update your **packages.json** file in the folder **salesforce-b2c-commerce-cloud-by-novalnet** to merge the Novalnet client-side scripts (like **Javascript, SCSS**) with the SFRA base cartridge.

Its default value will be:

../storefront-reference-architecture/cartridges/app_storefront_base/

```
{
  "name": "int_novalnet_sfra",
  "version": "22.7.0",
  "description": "Novalnet Payment Cartridge",
  "main": "index.js",
  "paths": {
    "base": "./storefront-reference-architecture/cartridges/app_storefront_base"
  },
  "scripts": {
    "lint:js": "sgmf-scripts --lint js",
    "lint:css": "sgmf-scripts --lint css",
    "test": "sgmf-scripts --test test/unit/**/*.js",
    "uploadCartridge": "sgmf-scripts --uploadCartridge int_novalnet_sfra && sgmf-scripts --uploadCartridge int_novalnet_core && sgmf-scripts --uploadCartridge bm_novalnet",
    "compile:js": "sgmf-scripts --compile js",
    "compile:scss": "sgmf-scripts --compile css"
```

Figure 3

Step 4: Include the **Novalnet's SCSS** file in the file **webpack.config.js** to seamlessly make use of the Novalnet's styling.

Its default value will be:

../storefront-reference-architecture/cartridges/app_storefront_base/cartridge/client/default/scss

```
alias: {
  base: path.resolve(__dirname,'../storefront-reference-architecture/cartridges/app_storefront_base/cartridge/client/default/scss')
        }
      }
```

Figure 4

Step 5: To integrate Novalnet's payment cartridge into your Sales commerce cloud site, perform the following steps.

Install Node modules:

From your project's root directory, install Node modules using following command,

```
npm install
```

Compile the code:

Compile the CSS, JS scripts and fonts using following command,

```
npm run compile:js && npm run compile:scss
```

Upload the code:

Upload the code to your Code Deployment folder in the Business Manager using following command,

```
npm run uploadCartridge
```

Step 6: Cartridge assignment
Site Cartridge assignment:

Then login to shop admin and navigate to **Administration** → **Sites** → **Manage Sites** → **RefArch** → **Settings** tab to add the mentioned code **'int_novalnet_sfra:int_novalnet_core:'** in prefix to the field **Cartridges**.
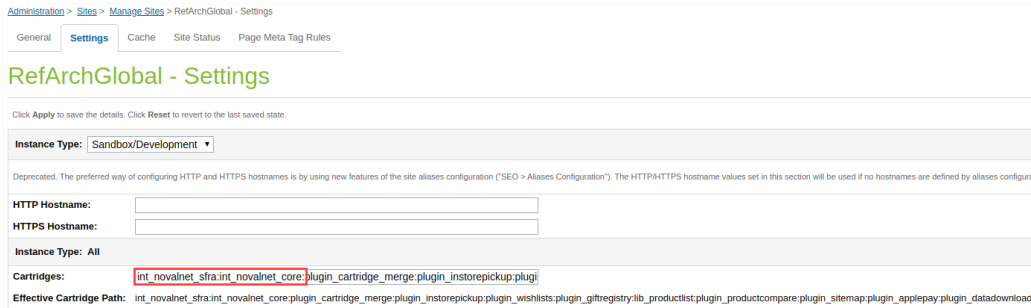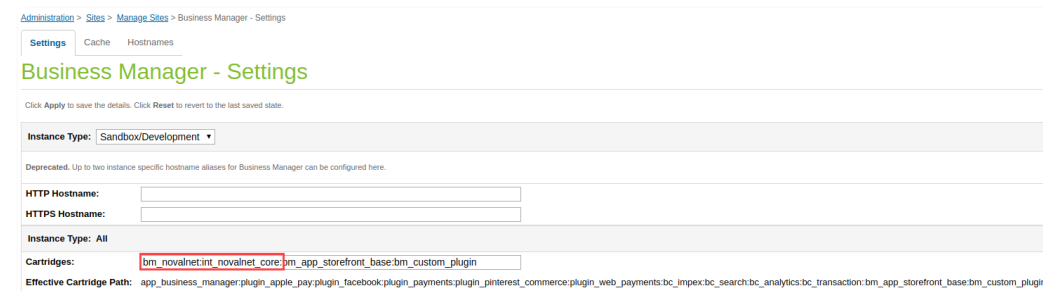

Figure 5

Business Manager Cartridge assignment

Again navigate to **Administration** → **Sites** → **Manage Sites** → **Business Manager** → **Settings** tab to add the mentioned code **'bm_novalnet:int_novalnet_core:'** in prefix to the field **Cartridges**.

Figure 6

Step 7: Importing Metadata

Navigate to the path: **salesforce-b2c-commerce-cloud-by-novalnet** → **metadata** → **novalnet_site_template** → **sites** and rename the folder **SiteID** of the site you want as shown in **Figure 7** and **8**.
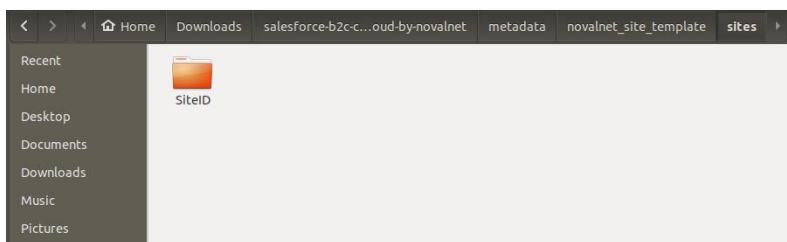

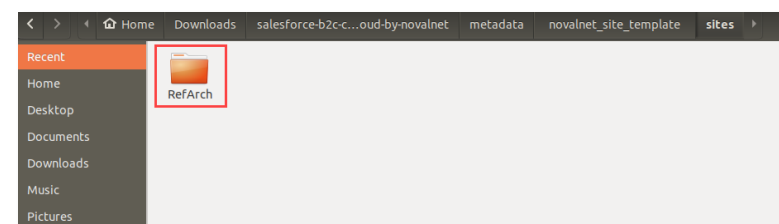Figure 7 - Before changing the folder name

Figure 8 - After changing the folder name

Then, go to the **salesforce-b2c-commerce-cloud-by-novalnet** → **metadata** path and compress the folder **novalnet_site_template**.
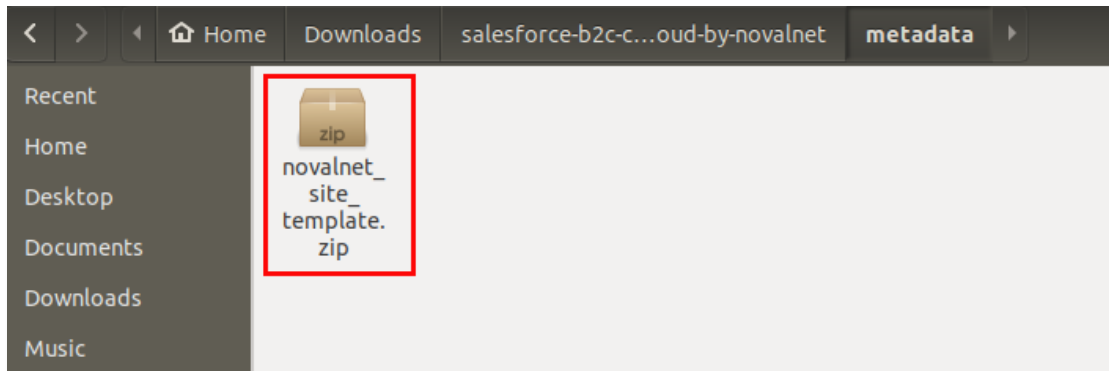
Figure 9

Navigate to the **Administration** menu in shop admin and click on the **Site Development** sub-menu.
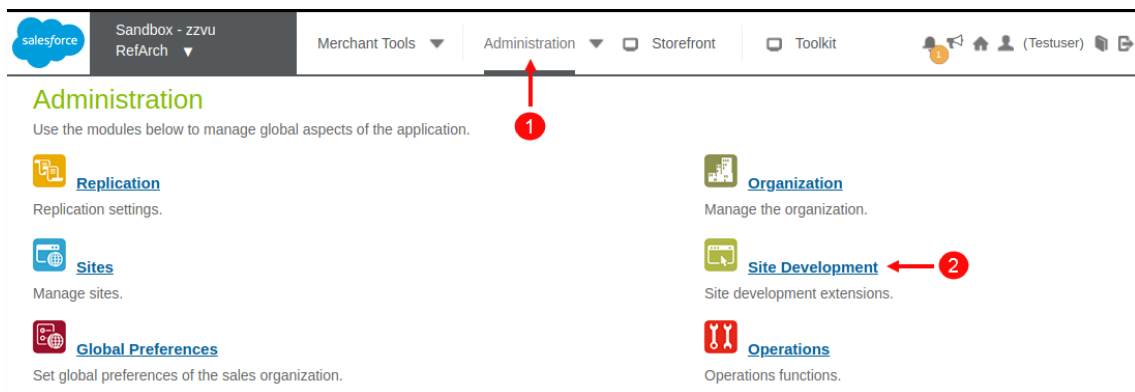

Figure 10

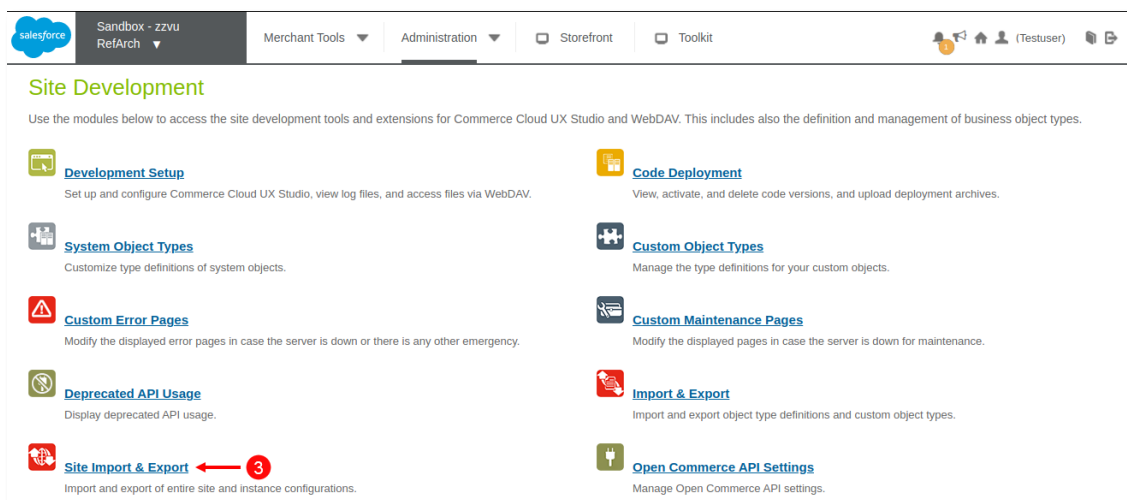Then click on the sub-menu **Site Import & Export**.

Figure 11

In the **Site Import & Export** page, browse and upload the compressed package of Novalnet.

Figure 12
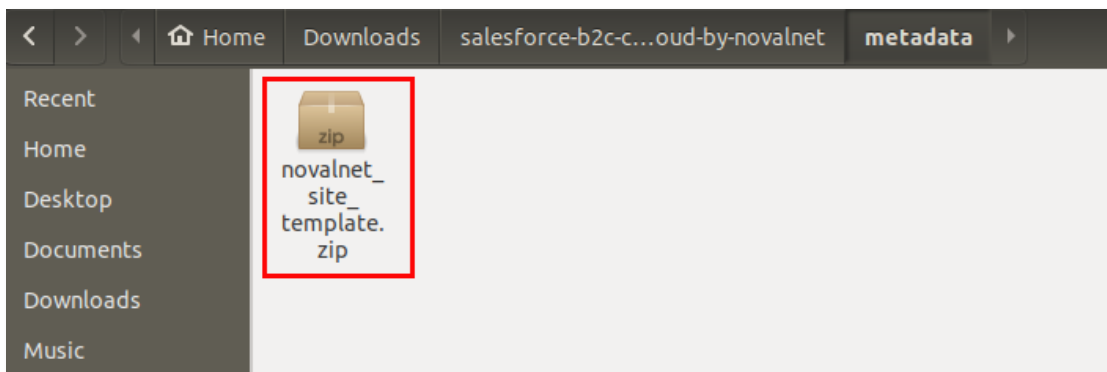

Figure 13

Once uploaded, the Novalnet payment cartridge will be ready to import. Select the **Novalnet** package and click on the **Import** button.

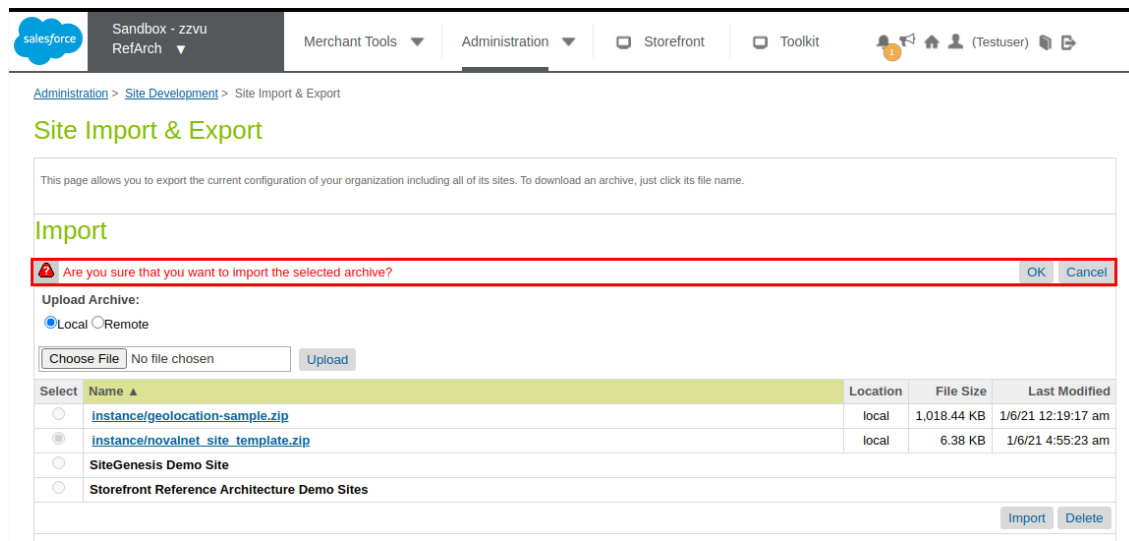Figure 14

Confirm the action by clicking **OK** from the alert that appears.

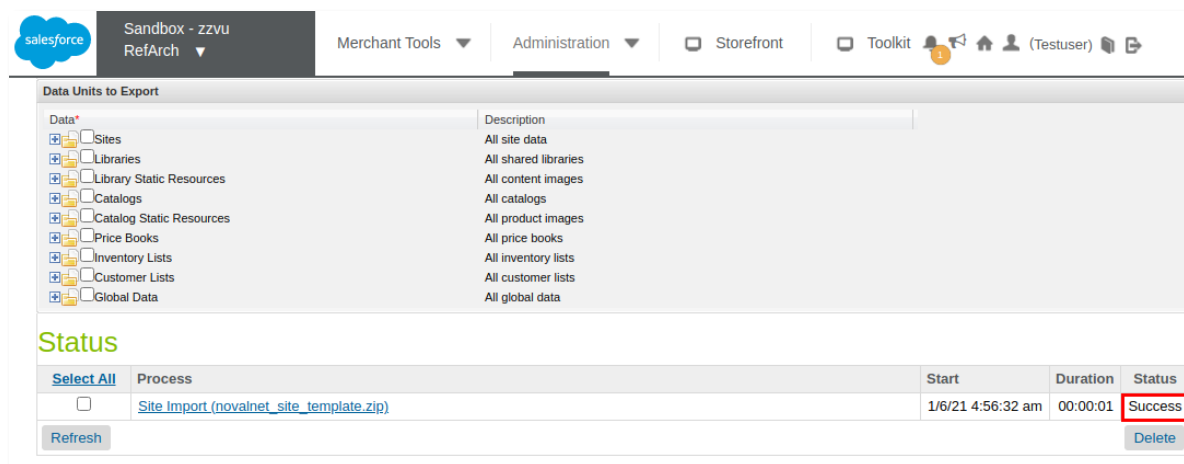After successfully imported, the **Status** of the import can be seen as **Success**.

1.2 Global Configuration in the Salesforce commerce cloud shop system

To view the Novalnet Global Configuration in your shop system, assign Business Manager modules permission. Assign role to **Novalnet Global Configuration** to access Business Manager Modules by following the below steps,

Step 1: Navigate to **Administration → Organization → Roles & Permissions** and select a specified role.

Step 2: On the **Business Manager Module** tab, select the context you want to assign permissions and click **Apply**.

Step 3: Select the module "**Novalnet Global Configuration**" under **Site Preferences** and grant Write access to enable the permissions.

Step 4: Then click **Update** button at the bottom of the page to grant permissions to specific Business Manager Modules.

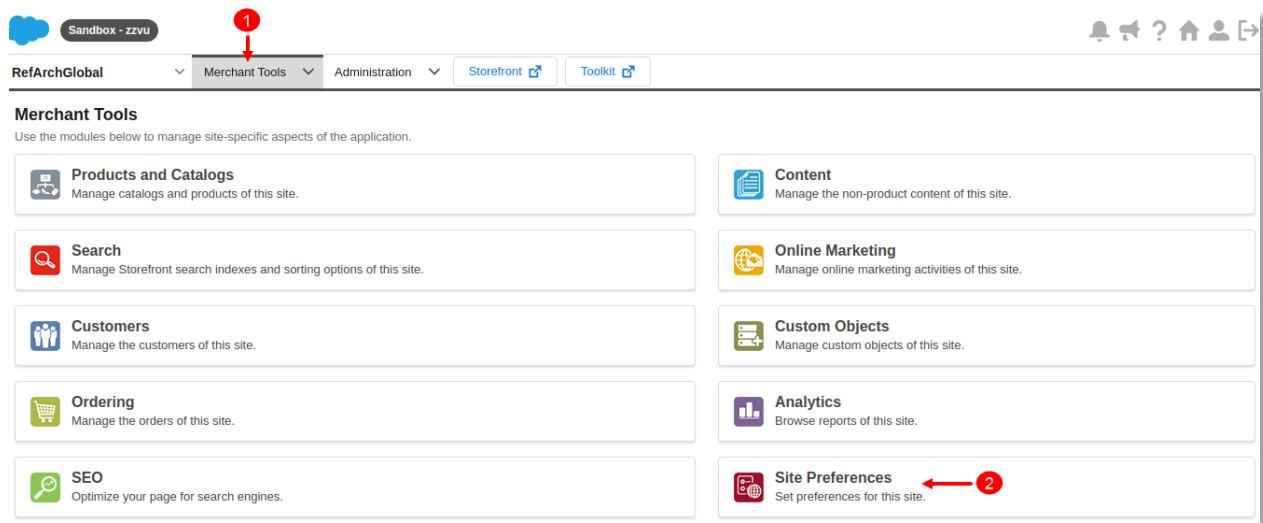Now, navigate to the **Merchant Tools → Site Preferences** menu in shop admin as shown below.

Then click on the sub-menu **Novalnet Global Configuration**.

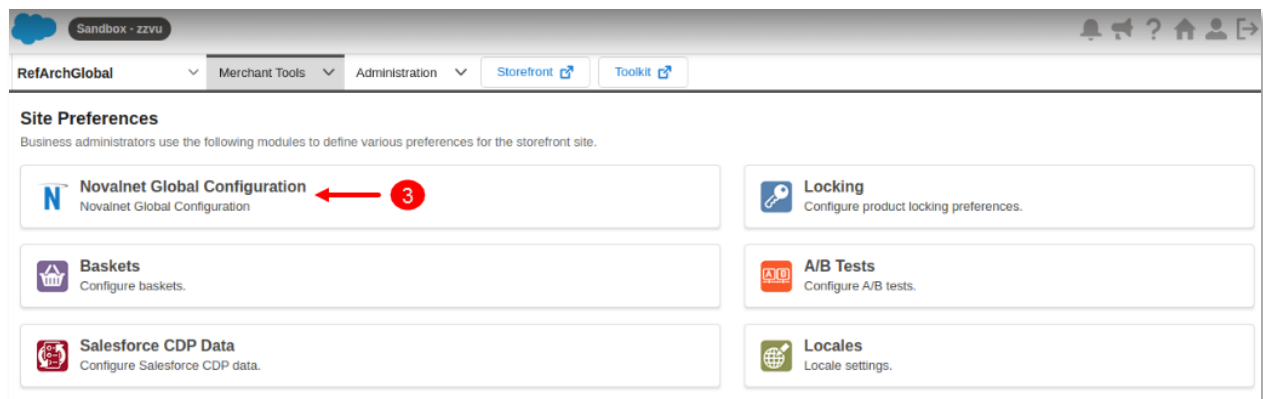Configure your merchant credentials from Novalnet admin portal in the **Novalnet Global Configuration**.

ⓘ **Novalnet Enabled** - enable this configuration to display payment method on shop checkout page.

ⓘ **Product activation Key** - a unique token for merchant authentication and payment processing.

ⓘ **Payment access Key** - your secret key used to encrypt the data to avoid user manipulation and fraud.

ⓘ **Tariff ID** - a unique identifier created based on the tariff type at Novalnet.

To get your **Product activation key**, **Payment access key** , go to the Novalnet Admin Portal, navigate to **Projects** menu and choose your project as shown below.
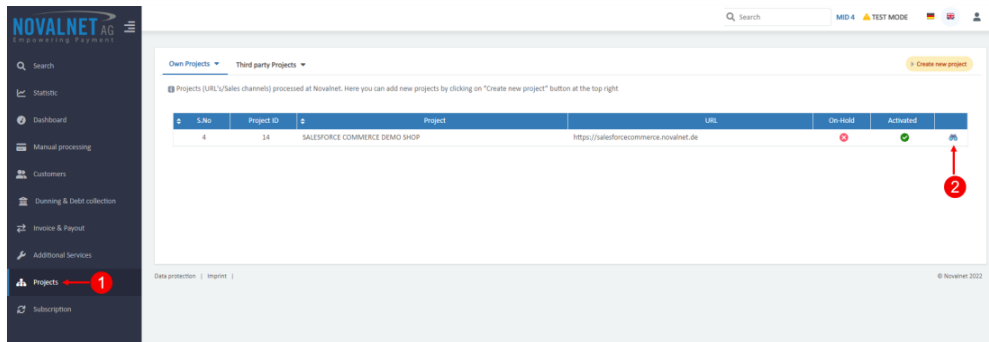

Figure 20

Click **API credentials,** copy the **API Signature (Product activation key)** and **Payment access key** as shown below.
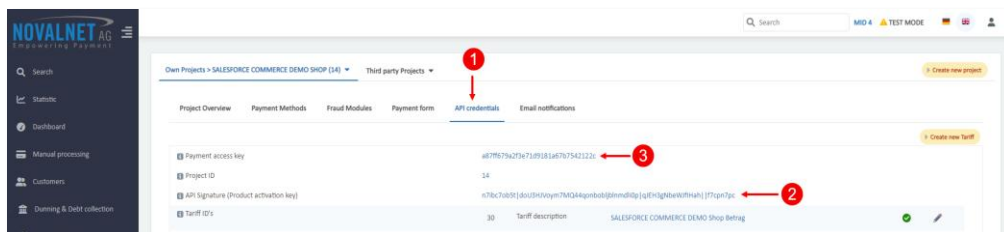

Figure 21

Paste the **Product activation key** and **Payment access key** in the respective fields in your shop admin panel. Next, choose the Tariff ID from the drop down menu that you have created in the Novalnet Admin Portal for this Shopware shop system.

Figure 22

1.2.1   Client key configuration in the Novalnet Admin Portal

The client key is a unique key which is linked with your Novalnet merchant account to authenticate your client based requests. You need the client key to render the secure payment form and tokenize (temporarily) the sensitive information.

👉 Novalnet allows client-side request(s) only from the **whitelisted domains under a particular project** in the Novalnet Admin Portal. The domain must be a valid (secured https://) website. Please follow the below steps to whitelist multiple domains under a single client key in the Novalnet Admin Portal.

Step 1: Go to the Novalnet Admin Portal.

Step 2: Navigate to the **Projects** menu and click view 🔍 icon on the right to view your project details as Shown below.

Step 3: On the projects details page click **API credentials** and click ✏️ Edit beside **Allowed Domain(s)** as shown below.

Step 4: Paste your website URL in the **Domain name** field and click **+ Add** as shown below.

Step 5: After successfully adding the **Domain name**, the web URLs are listed under **Allowed Domain(s)** as shown below.
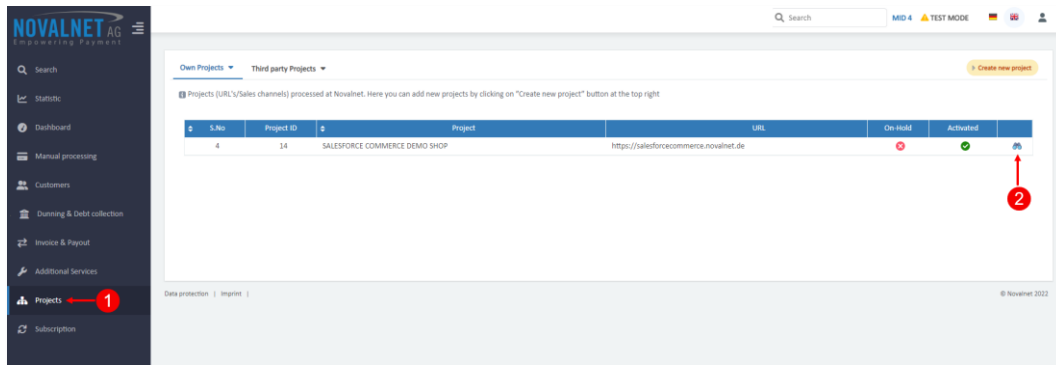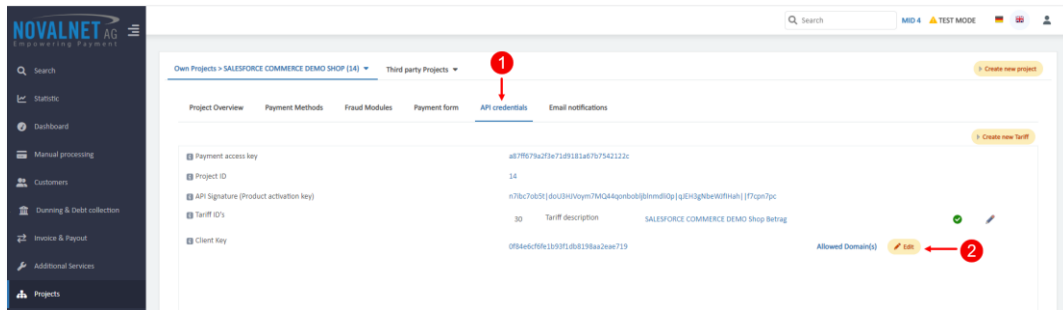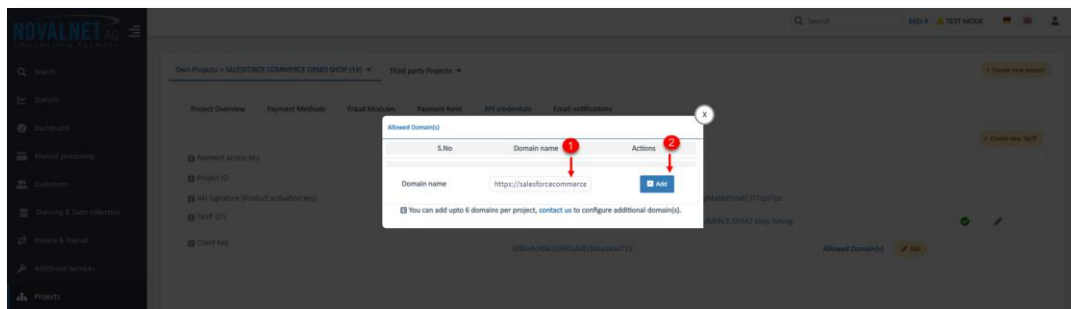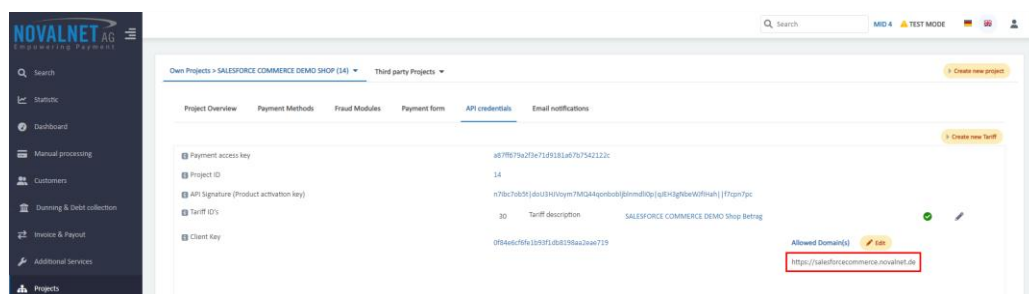
1.2.2   Notification/Webhook URL Configuration in the Novalnet Admin Portal

In the Novalnet Global Configuration page on your shop system you will find your Notification / Webhook URL under **Notification / Webhook URL** Setup as shown below

To configure the **Notification / Webhook URL**, go to Novalnet Admin Portal under **Projects → choose your project → API credentials → Edit** - paste **the Notification / Webhook URL** under the field Vendor script URL / Notification & Webhook URL.

ⓘ   For example,   https://<Yourshopurl>/NovalnetWebhook-Notify

Click the **Edit** button next to the **Vendor script URL/ Notification & Webhook URL** field.

Figure 28

Paste the Notification/ Webhook URL in the field and click the **update** button.

Figure 29

In your shop system, you can additionally test the Notification / Webhook URL manually and send notification emails to specific email addresses as shown below

Figure 30

ⓘ   **Notification / Webhook URL** - Required to keep the merchant's database/system updated and synchronized with Novalnet (for example, up-to-date transaction status delivery).

ⓘ   **Allow manual testing of the Notification / Webhook URL** - Enable this to test the Novalnet Notification / Webhook URL manually. Disable this before setting your shop system into live, to block unauthorized calls from external parties.

ⓘ   **Send e-mail to** - Every webhook notification execution detail will be sent as a message to the e-mail address defined in this field.

1.3 Payment Activation in the Novalnet Admin Portal

All the Novalnet supported payment methods can be viewed here: www.novalnet.com/payment if you have questions about the payment methods or additional payment method requests, please contact sales@novalnet.de

To activate the preferred payment methods for your website, log in to the Novalnet Admin Portal, and navigate to the **Projects** menu. Choose your project, go to the **Payment Methods** tab and click **Edit Payment Methods** in the top right corner as shown below.
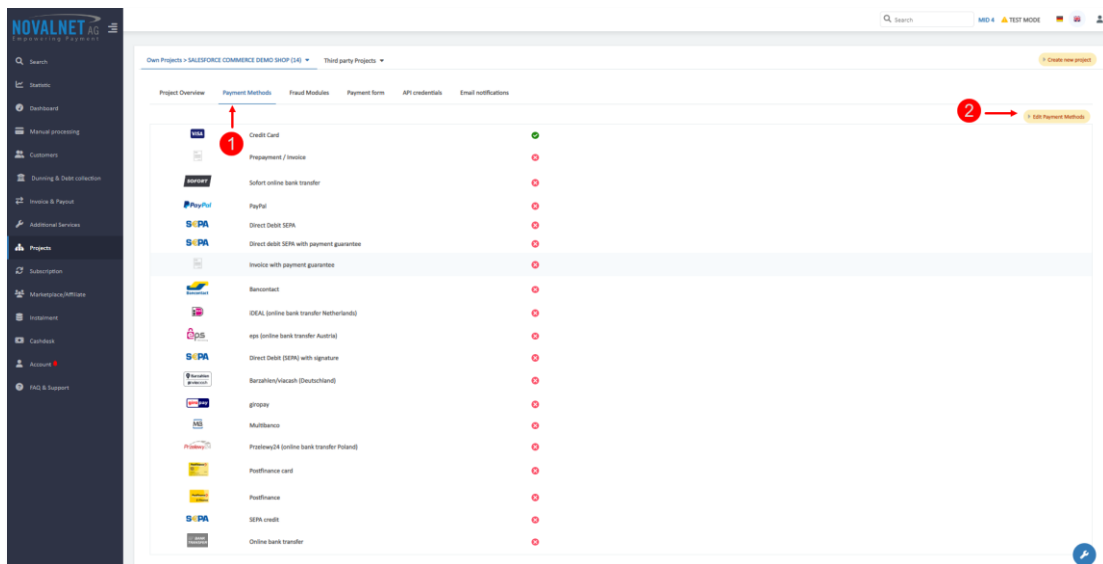

Figure 31

Next, select the preferred payment methods and click **Update** to activate them as shown below
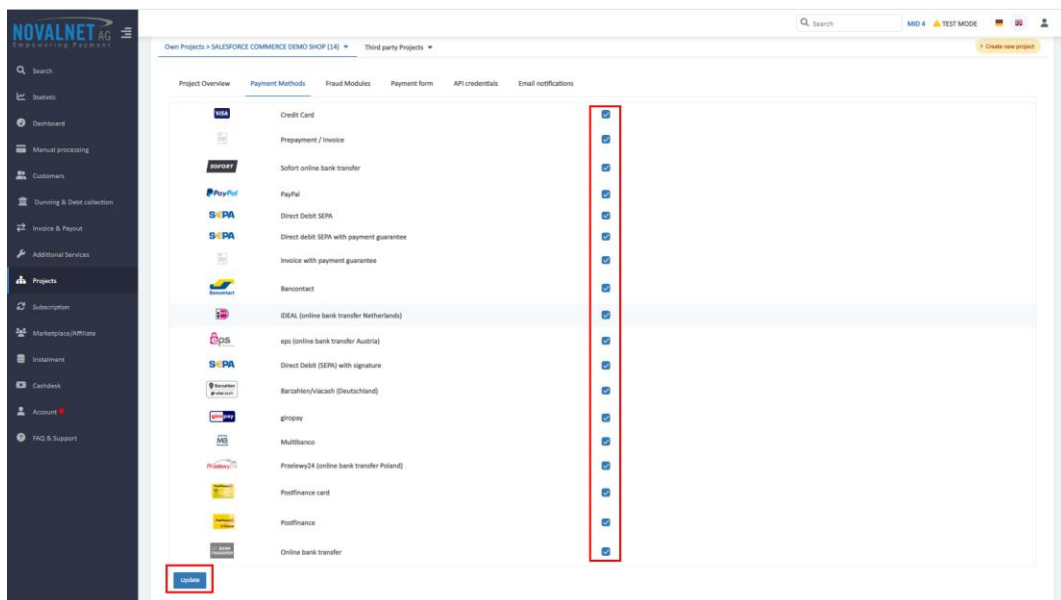
Figure 32

To use the **PayPal** payment method, configure the PayPal API details in the Novalnet Admin Portal as shown below.
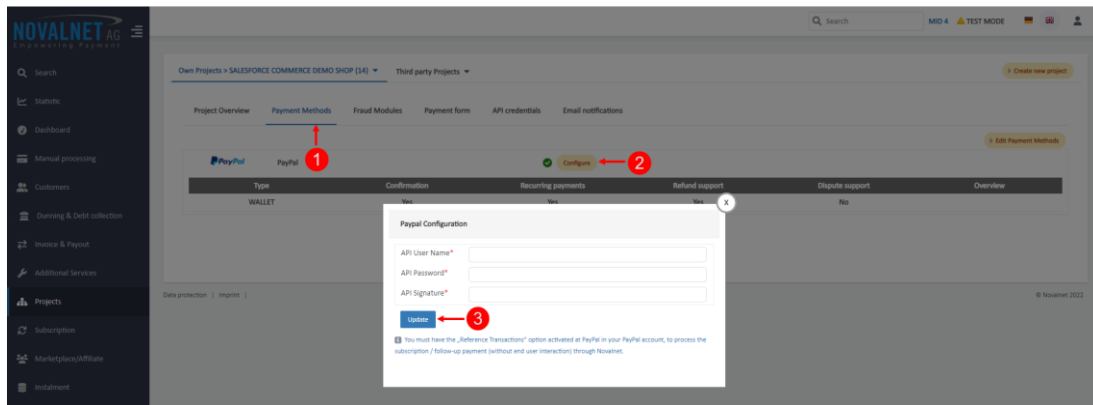
Figure 33

To use the **PostFinance payments**, configure **Ep2-Merchant ID** details in Novalnet Admin Portal as shown below.

Figure 34

1.4 Payment Configuration in the Salesforce commerce cloud shop system

After activating the payment methods in the Novalnet Admin Portal, you must enable these payment methods in your shop system to display them on your Salesforce commerce cloud checkout page. Navigate to **Merchant Tools → Ordering → Payment Methods**.
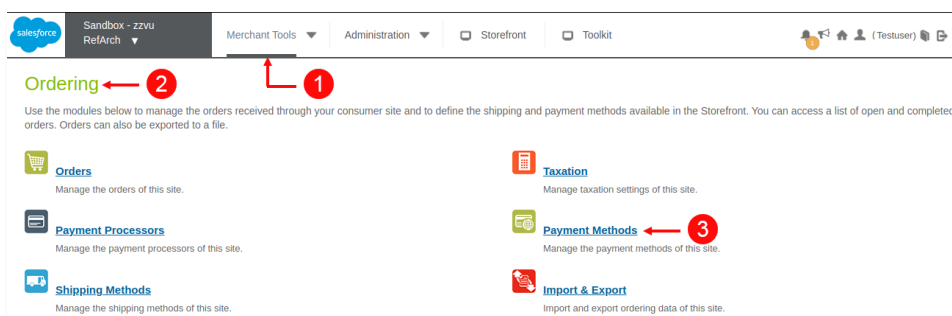
Figure 35

Click the dropdown to set the value as **Yes** and click **Apply** button**,** to enable the preferred payment methods.
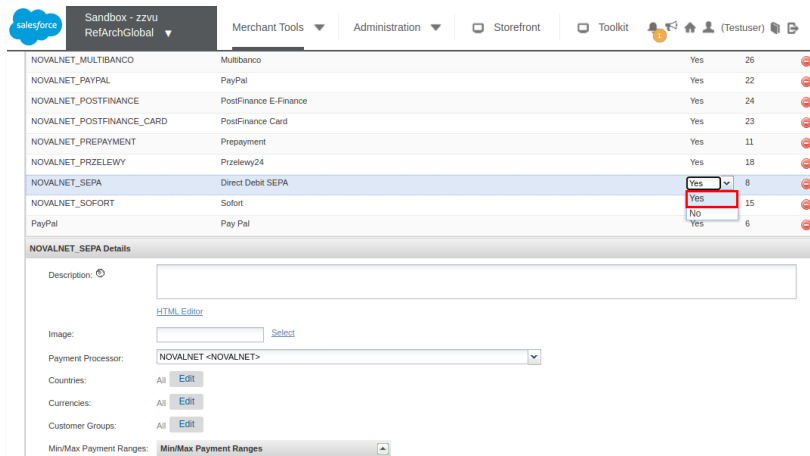
Figure 36

After adding the preferred payment methods, you can see the payment methods getting displayed in the checkout.
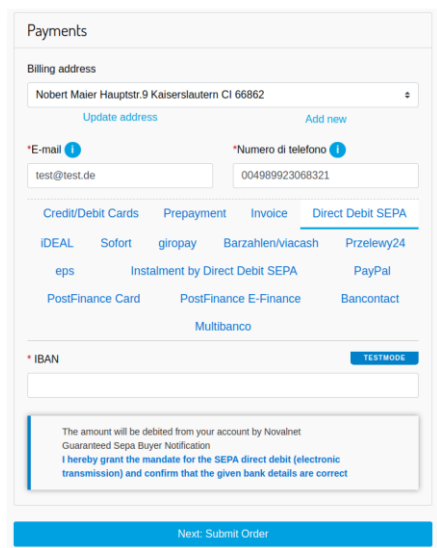
Figure 37
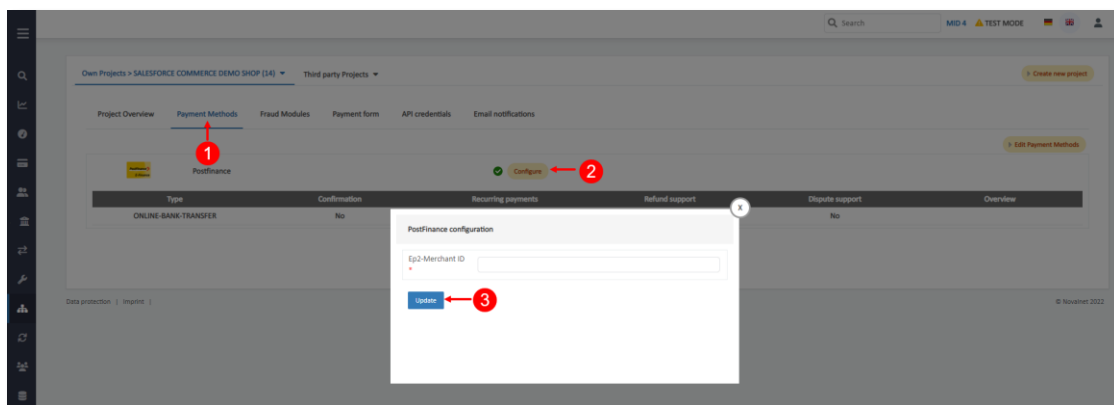
2   TESTING AND GOING LIVE

Execute test transactions by navigating to **Merchant Tools → Ordering → Payment Methods** choose the specific payment method (e.g. Credit/Debit Cards) and set the **Enable test mode** as **Yes** at each individual payment configuration page. Finally, click **Save** to save the changes. In the test mode the transaction amount will not be charged by Novalnet.

Figure 38

ℹ Refer below URL for the Novalnet test payment data for testing

https://developer.novalnet.com/testing/

Execute orders in LIVE MODE

To proceed with **LIVE** orders, Don't forget to disable test mode by clicking **No** in the Enable test mode option under individual payment configuration page.

ⓘ If you have any recommendations or suggestions for improvement, kindly share your thoughts with us to develop our payment module further to technic@novalnet.de or call us at +49 89 9230683-19.

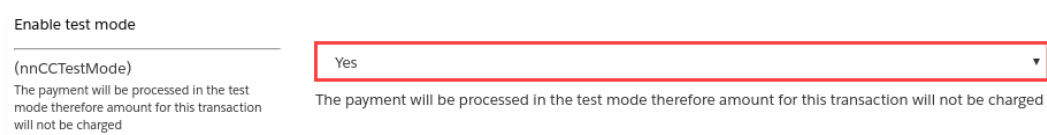## 3   SUPPORTED PAYMENT METHODS

This payment module for Salesforce commerce supported the following payment methods.

Direct Debit SEPA, Credit/Debit Cards, Invoice, Prepayment, Invoice with payment guarantee, Direct Debit SEPA with payment guarantee, Instalment by Invoice, Instalment by Direct Debit SEPA, iDEAL, Sofort, giropay, Barzahlen/viacash, Przelewy24, eps, PayPal, PostFinance Card, PostFinance E-Finance, Bancontact and Multibanco.
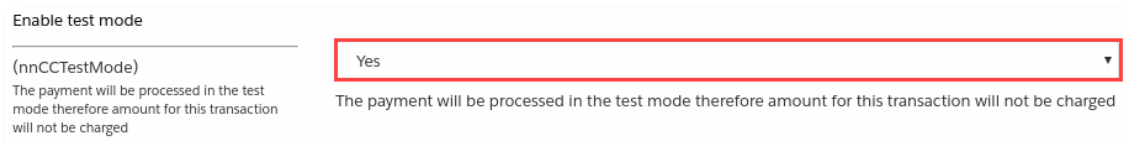
4   ADDITIONAL CONFIGURATION

4.1 Additional configuration for all the payment methods

For additional payment configuration settings for each payment methods, navigate to **Merchant Tools →Site Preferences→ Custom Preferences** and then click on the each payment methods to configure the required additional payment settings.

Enable test mode

Click **Enable test mode** to test payments at your checkout page as shown below. In the test mode, the transaction amount will not be charged by Novalnet.
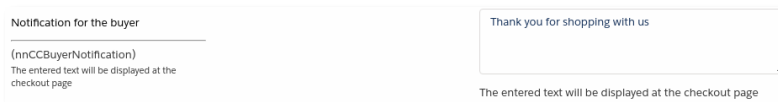
<div align="center">Figure 39</div>

Notification for the buyer

Text entered in this field will be displayed on the payment success page and order e-mail. The message can be for example: *Thank you for shopping with us.*

<div align="center">Figure 40</div>

Refer to the image below to view how the notification appears to the buyer.

<div align="center">Figure 41</div>

Payment Action (Debit immediately / Reserve funds for later/ Authorize with zero amount)

👉 *This option is available only for the following payment methods:*

Credit/Debit Cards, Direct Debit SEPA, *Direct Debit SEPA with payment guarantee, Instalment by Direct Debit SEPA, Invoice, Invoice with payment guarantee, Instalment by Invoice* and *PayPal*.
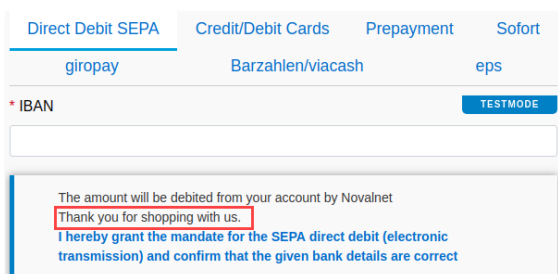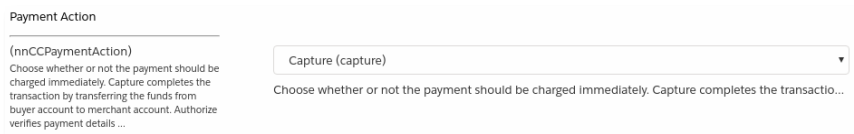
You can choose between two options - **Capture** and **Authorize** which are both explained below.

ⓘ **Capture** - **This is the default setting** where transactions are directly confirmed, and funds are automatically transferred from buyer's account to the merchant account. This can be changed as per your business requirement.
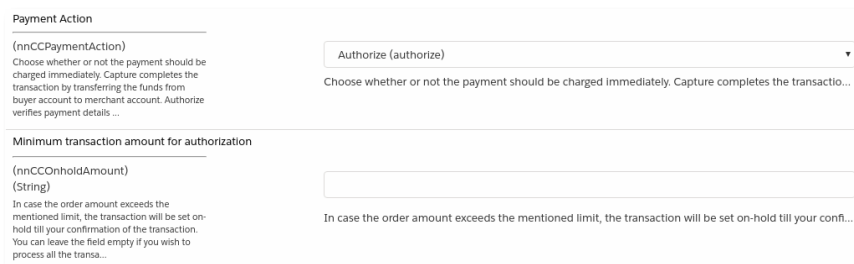

Figure 42

ⓘ **Authorize** - Payment details are verified while the funds are reserved, which will be captured later. Please note if you fail to execute a capture within 14 days the reservation will automatically expire!

ⓘ **Minimum transaction amount for authorization** - Transactions above this amount will be "**authorized**" only and captured later. Leave the field blank to authorize all transactions.
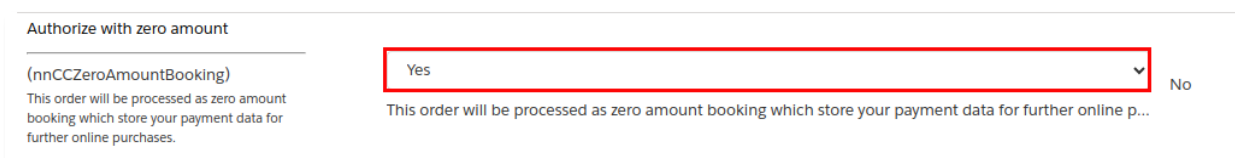
Figure 43

Authorize with zero amount

👉 *This option is available only for the **Credit Card** and **Direct Debit SEPA.***

If the purchase order succeeds, a transaction with the amount 0 is executed. This gives you the advantage of deducting the amount from the buyer in advance (For example, if certain goods have yet to be manufactured or are not in stock).

Click the **Authorize with zero amount** dropdown to set the value as **Yes** and click **Save**.

Figure 44

To set an amount for each transaction with the amount 0, navigate to **Merchant Tools → Ordering → Novalnet Transactions** and Select the respective order of the Novalnet transaction details. Click **Book transaction**, enter the desired amount for the €0 transaction (enter 1999 = €19.99 in the smallest currency unit) in **Transaction booking amount** field and click **Submit**.

Figure 45

Figure 46

Click **Yes** to confirm that you want to book the order amount and click **OK** to close the popup window with success meassage.

Figure 47

Figure 48

The amount will be debited, and a new TID will be generated.

Figure 49

Guarantee payment configuration

☛ *This option is available only for **Direct Debit SEPA with payment guarantee** and **Invoice with payment guarantee.***

When the basic requirements are met, Novalnet offers you the option to process payments as guarantee payments. For more information about guaranteed payments and basic requirements, please visit: https://developer.novalnet.com/onlinepayments/aboutguarantee#basic-requirements

Force Non-Guarantee payment

Enable this option to process payments as non-guarantee payments when the guarantee conditions are not met.

Figure 50

Instalment payments configuration

☛ *This option is available only for **Instalment by Direct Debit SEPA** and **Instalment by Invoice.***

When the basic requirements are met, Novalnet offers you the option to process payments as instalment payments. For more information about instalment payments and basic requirements, please visit: https://developer.novalnet.com/onlinepayments/aboutinstalment#basic-requirements

Instalment cycles

Instalment cycle refers to the pre-defined period for partial payments, allowing buyers to pay their total order amount in parts. The intervals or cycles vary based on shop admin configuration.

Define which installment cycles you wish to offer in your shop (e.g., 2 cycles, 3 cycles, 4 cycles, 6 cycles etc.) and click **Save**. The buyer can then choose among these instalment cycles if they wish to pay in instalments.

Figure 51

The pre-defined instalment details will be visible for the buyer under the chosen instalment payment method as shown below.

Payment due date (in days)

Payment due date (in days) refers to the duration period (number of days) given for buyer to complete the payment. The payment process and duration period may differ for each payment method.

👉 *This option is available only for the following payment methods:*

Direct Debit SEPA**, **Invoice**, **Prepayment *and* ***Barzhalen/viacash***.

Figure 53

ⓘ For ***Direct Debit SEPA**,* enter the days after the payment is debited (between 2 and 14 days).

ⓘ For ***Invoice**,* enter the number of days given to the buyer to transfer the amount to Novalnet (must be greater than 7 days). If this field is left blank, 14 days will be set by default.

ⓘ For ***Prepayment**,* enter the number of days given to the buyer to transfer the amount to Novalnet (must be greater than 7 days). If this field is left blank, 14 days will be set by default.

ⓘ For ***Barzhalen/viacash**,* enter the number of days given to the buyer to pay at a store near by. If this field is left blank, 14 days will be set by default for slip expiry.

4.2 Additional configuration for Novalnet Credit/Debit Cards

Enforce 3D secure payment outside EU

By enabling this option, all payments from cards issued outside the EU will be authenticated via 3DS 2.0 SCA.

Figure 54

Custom CSS settings

If you wish to change the default design of the Credit/Debit Cards form (for example to use your corporate identity), you can do it here. Leave this field unchanged to use the default settings.

Figure 55

5   MANAGING SALESFORCE COMMERCE CLOUD ADMIN PANEL

To view the Novalnet transaction details in your shop system, assign Business Manager modules permission. Assign role to **Novalnet Transactions** to access Business Manager Modules by following the below steps,

Step 1: Navigate to **Administration** → **Organization** → **Roles & Permissions** and select a specified **role**.

Step 2: On the **Business Manager Module** tab, select the context you want to assign permissions and click **Apply**.

Step 3: Select the module "**Novalnet Transactions"** under **Ordering** and grant **Write** access to enable the permissions.

Step 4: Then click **Update** button at the bottom of the page to grant permissions to specific Business Manager modules.

ⓘ Once updated, **Novalnet Transactions** will get available under **Merchant Tools**.

5.1 Order Management

Manage your orders and view their details under **Merchant Tools → Ordering → Novalnet Transactions** in your salesforce commerce cloud admin panel as shown below.
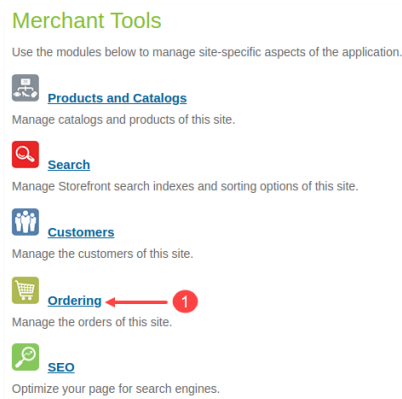
Figure 56
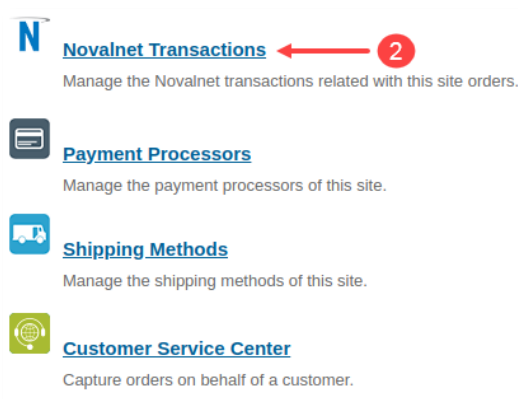
Figure 57

5.2 Transaction Overview

Click on the particular order **Number** to review the overview of the Novalnet transaction details as shown below.

Novalnet Transactions

Number	Order Date	Created By	Customer	Customer Email	Payment Method	Order Total	Order Status
00000302	4/30/21 6:59 am	Customer	Max Mustermann	test@novalnet.de	Direct Debit SEPA	€22.99	COMPLETED
00000301	4/30/21 6:57 am	Customer	Max Mustermann	test@novalnet.de	Direct Debit SEPA	€22.99	COMPLETED
00000210	4/29/21 1:36 pm	Customer	Max Mustermann	test@novalnet.de	Barzahlen/viacash	€22.99	COMPLETED
00000209	4/29/21 1:04 pm	Customer	Max Mustermann	test@novalnet.de	Direct Debit SEPA	€34.71	COMPLETED
00000208	4/29/21 12:56 pm	Customer	Max Mustermann	test@novalnet.de	Barzahlen/viacash	€69.99	COMPLETED

Figure 58

Figure 59

5.3 Order details for Instalment payments

To review the completed and pending payments for a particular instalment order, choose the particular order and then scroll down to the **Instalment Summary** section as shown below.

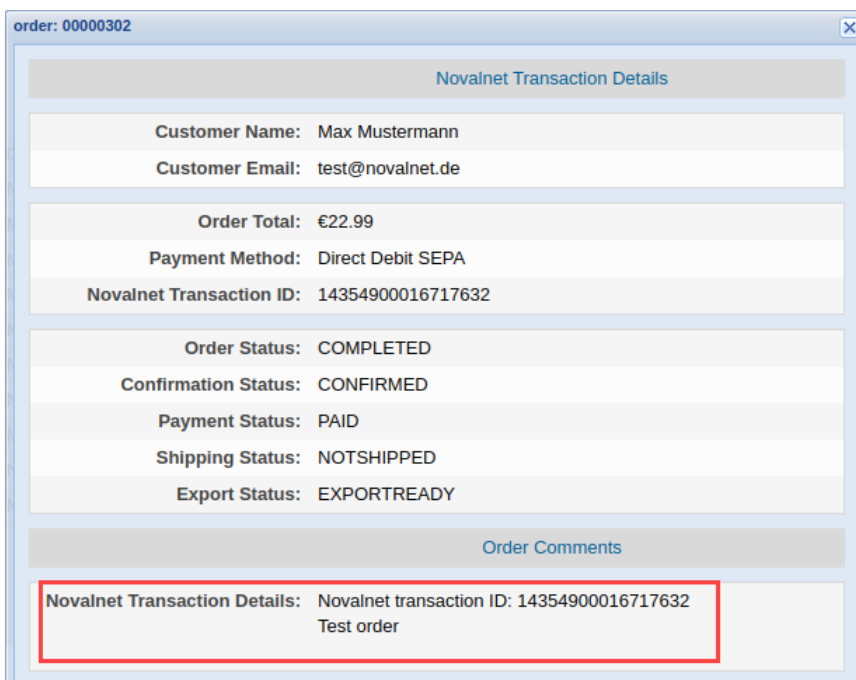|	Instalment Summary				
Instalment Cancel					
S.no	Date	Novalnet Transaction ID	Status	Amount	Instalment Refund
1	2021-05-03 11:06:35	14365100010107400	COMPLETED	€ 35,00	Refund
2	2021-06-03 11:06:36	14365100010107426	COMPLETED	€ 35,00	Refund

Figure 60

5.4 Confirming / Cancelling a transaction

To confirm or cancel an on-hold payment, navigate to **Ordering → Novalnet Transactions** in your shop admin panel and select the particular order.

You can now use the drop-down list to confirm / cancel the order under **Please select status** field of the **Manage Transaction process**. Then click to Submit save the changes.

Figure 61

Figure 62

After you have confirmed / cancelled an order, the new transaction status will be shown under the **Order Comments** section as shown below. Refer to the chapter 5.2 Transaction Overview for more details about the **order comments**.

Figure 63

Figure 64

5.5 Refunding an order

You can refund the buyer either the Full or Partial order amount. Refund can be initiated by navigating to **Ordering → Novalnet Transactions**. Select the particular order and enter the required refund amount (in minimum unit of currency. E.g. enter 100 which is equal to 1.00) in the corresponding field. Click **Submit** as shown below.

Figure 65

Once the full or partial order amount has been successfully refunded, the order status will get changed. At this point, a new transaction (TID) will be generated. You will see the new transaction status under **Order Comments** section of the order. Refer to the chapter 5.2 Transaction Overview for more details about the **Order Comments**.

5.6 Refunding Instalment orders

5.6.1 Instalment orders refund process

To refund an instalment order, navigate to **Ordering → Novalnet Transactions** and click on the particular order. Scroll down to the **Instalment Summary** section and click **Refund** next to the completed instalment cycle that should be refunded as shown below

Figure 66

Enter the Refund amount and click **Confirm** as shown below

Figure 67

Once the instalment order amount has been successfully refunded, you will see the new transaction status will be displayed under **Order Comments** section. Refer to the chapter 5.2 Transaction Overview for more details about the **Order Comments**.

5.6.2 Instalment payment refund process

To refund the full amount for instalment orders, navigate to **Ordering → Novalnet Transactions** and click on the particular order. Scroll down to the **Instalment Summary** section and click **Instalment cancel** to refund the full amount as shown below.

Instalment Summary					
Instalment Cancel					
S.no	Date	Novalnet Transaction ID	Status	Amount	Instalment Refund
1	2021-05-03 11:06:35	14365100010107415	COMPLETED	€ 35,00	Refund
2	2021-06-03 11:06:36		PENDING	€ 35,00	

Figure 68

☛ Once full amount get refunded for instalment orders, then respective instalment orders will get cancelled. Further, no instalments will take place.

Once the full amount for instalment orders successfully refunded, you will see the new transaction status will be displayed under **Order Comments** section. Refer to the chapter 5.2 Transaction Overview for more details about the **Order Comments**.

6 AVAILABILITY, FALLBACK / RECOVERY

The Novalnet payment system guarantees an uptime of almost 100%. In case the system fails, there is no fail-over to allow transactions to proceed. Customers will not be able to use Novalnet Payments to checkout. Users will instead be provided with friendly error messaging.

If you continue to see any issues, please contact our Novalnet representative so that we may investigate this further. Please note that when contacting Novalnet, we may ask log details that can be found in the log with the custom-Novalnet prefix and Service-Novalnet prefix that may need to be extracted from the logs as well as assistance with reproducing the issue step by step.

7 TECHNICAL SUPPORT THROUGH NOVALNET

For any questions or further enquiries please contact one of the following departments as per your requirement. Our in-house experts are ready to assist you in case of queries or issues. For **installation assistance** contact technic@novalnet.de or call +49 89 9230683-19.

For a **merchant account, new payment plugin or additional payment methods**, please contact sales@novalnet.de or call +49 89 9230683-20.

If you have any defects, recommendation or suggestion for improvement? Kindly share your thoughts with us to develop our payment cartridge further technic@novalnet.de or call us at +49 89 9230683-19.

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