

# Installation Manual for FirstData Connect Magento

This manual describes the installation and usage of the FirstData Connect extension for Magento.

**Release Date:** Mon, 07 Aug 2023 14:01:06 +0200  
**Version:** 3.0.430

wallee AG  
General-Guisan-Strasse 47  
CH-8400 Winterthur

E-Mail: [info@sellxed.com](mailto:info@sellxed.com)

Telefon:

CH: +41 (0)44 505 13 60

DE: +49 (0)40 2999 60117

UK: +44 (0)161 850 6890

US: +1 (0)205 557 5869

© copyright by wallee AG Mon, 07 Aug 2023 14:01:06 +0200

#####conditional#####

# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>6</b>
1.1	Process of the Installation .....	6
1.2	System Requirements .....	7
<b>2</b>	<b>Configuration FirstData Connect .....</b>	<b>8</b>
2.1	Test Environment and Live Platform for Administration .....	8
2.2	Mandatory: Configuration of the Module .....	8
2.3	Optional: Professional Version - Creating a Certificate File .....	8
2.4	Activating the Payment Methods and Testing .....	9
<b>3</b>	<b>Module Installation and Update in the Magento Shop .....</b>	<b>10</b>
3.1	Installation .....	10
3.1.1	Magento 1 .....	10
3.1.2	Magento 2 .....	10
3.2	Updates and Upgrades .....	11
3.2.1	Update Checklist .....	12
3.2.2	Update Instructions .....	12
3.3	Database Migration .....	13
3.3.1	Magento 1 .....	13
3.3.2	Magento 2 .....	13
<b>4</b>	<b>Module Configuration in the Magento Shop .....</b>	<b>14</b>
4.1	Configuration of the Main Module .....	14
4.1.1	Magento 1 .....	14
4.1.2	Magento 2 .....	14
4.2	Configuration of the Payment Method .....	15
4.2.1	Magento 1 .....	15
4.2.2	Magento 2 .....	16
4.3	Direct Capturing of Transactions .....	17
4.4	Uncertain Status .....	17
4.4.1	Setting the order state .....	17
4.5	Optional: Validation .....	18
4.5.1	Usage of the Integrated Multishop Functionality of Magento .....	18
<b>5</b>	<b>Settings / Configuration of Payment Methods .....</b>	<b>19</b>
5.1	General Information About the Payment Methods .....	19
5.2	Information on Payment Status .....	19
5.2.1	Order status "pending" / imminent payment (or similar) .....	19

5.2.2	Order status "cancelled" .....	19
<b>6</b>	<b>The Module in Action .....</b>	<b>20</b>
6.1	Capturing / Cancelling of Orders .....	20
6.1.1	Magento 1 .....	20
6.1.2	Magento 2 .....	20
6.2	Place Orders in the backend of Magento .....	22
6.2.1	Magento 1 .....	22
6.2.2	Magento 2 .....	23
6.3	Refunds .....	23
6.3.1	Magento 1 .....	23
6.3.2	Magento 2 .....	25
6.4	Useful Transaction Information on the Order .....	28
6.4.1	Magento 1 .....	28
6.4.2	Magento 2 .....	29
6.5	Usage of the Alias Managers / Token Solution .....	30
6.5.1	Magento 1 .....	30
6.5.2	Magento 2 .....	31
6.6	Tax Calculation Settings .....	33
6.6.1	Magento 1 .....	33
6.7	OneStepCheckout .....	33
6.7.1	Magento 1 .....	33
6.7.2	Magento 2 .....	34
6.8	Setup a Cron Job to Activate the Timed Operations .....	34
6.8.1	Magento 1 .....	34
6.8.2	Magento 2 .....	34
6.9	Magento 1 API Manual .....	34
6.9.1	General Information on Using the API .....	35
6.9.2	API Calls .....	35
<b>7</b>	<b>Testing .....</b>	<b>36</b>
7.1	Test Data .....	36
<b>8</b>	<b>Errors and their Solutions .....</b>	<b>37</b>
8.1	Module is not shown .....	37
8.2	The Referrer URL appears in my Analytics Tool .....	37
<b>9</b>	<b>Compatibility with Third-Party Plugins .....</b>	<b>38</b>
9.1	Magento 1 .....	38
9.1.1	Fees and discounts within Magento .....	38
9.2	Birthday and gender in Magento 1 .....	38
9.3	Birthday and gender in Magento 2 .....	38

<b>10</b>	<b>Error Logging .....</b>	<b>39</b>
10.1	Log Levels .....	39
10.2	Log Location .....	39
<b>11</b>	<b>Advanced Information .....</b>	<b>40</b>
11.1	Transaction Object .....	40
11.1.1	Magento 1 .....	40
11.1.2	Magento 2 .....	40

# 1 Introduction

This manual leads you through the installation, configuration and usage of the payment module for Magento and FirstData Connect.

Before you can begin with the installation, please make sure that you are in possession of all the necessary data:

- You should have received a Store ID from FirstData Connect (Usually an eleven digit combination of numbers)
- Shared Secret for the usage of Connect (Shared Secret Connect Interface)
- If you are working with the professional version of the module and have requested the API Interface with FirstData Connect, you should furthermore have received an API User ID, a client certificate as well as the corresponding passwords

**Note that you must use at least PHP version 5.6 for our plugins. PHP 8 or higher is currently not supported.**

## 1.1 Process of the Installation

In this document you will find all the information necessary for the installation of the module. It is important that you follow the checklist strictly. Only if you comply with each step we can ensure a secure usage in correspondence with all security regulations.

1. Configuration of the basic settings of the payment module
2. Configuration of the payment methods
3. Carrying out a test purchase by means of the attached [test data](#) at the end of this document

## Installation Service

Our payment plugins should have per default the correct settings for most of our customers' preferences. That means once you have entered the required credentials in the plugin configuration to connect your account to your website, the plugin should be fully operational. Should you be willing to receive detailed information on a setting you do not know, you may contact our support team who will be able to assist you further.

Our support team is at your disposal during regular business hours at: <http://www.sellxed.com/support>. Furthermore, you have the option of ordering our installation service. We will make sure the plugin is installed correctly in your shop: <http://www.sellxed.com/shop/de/integration-und-installation.html>

## .htaccess Directory Protection

In order to test the module, any kind of directory protection or IP blocking on your server must be deactivated. This is crucial as otherwise the payment feedback of FirstData Connect might not get through to the shop.

## 1.2 System Requirements

In general, the plugin has the same system requirements as Magento. Below you can find the most important requirements of the plugin:

- PHP Version: 5.4.x or higher
- Magento: 1.7.x or higher
- OpenSSL: Current version with support for TLS 1.2 or higher.
- fsockopen: The PHP function fsockopen must be enabled. The plugin must be able to connect to external systems over the Internet.
- PHP Functions: All common PHP functions must be enabled.

## 2 Configuration FirstData Connect

If you have merely bought the Standard Version of the module you only need to comply with the part **Configuration of the Module**

### 2.1 Test Environment and Live Platform for Administration

You can find the administration and the transaction overview if you click on this link (A client certificate is needed to access):

- [https://www.ipg-online.com/emea/login.jsp?lng=de\\_DE](https://www.ipg-online.com/emea/login.jsp?lng=de_DE).

Please note that you can only access the testing platform with a corresponding client certificate which you receive from FirstData Connect.

### 2.2 Mandatory: Configuration of the Module

[Navigate to the main module](#) in your shop. Please fill in the following data in to the appropriate location:

- Store ID (you will receive this directly from FirstData Connect)
- Shared Secret (you will receive this directly from FirstData Connect)

The remaining settings in the main module regard specific fraud settings to identify transactions without 3D secure. The default settings are set correctly for most of them.

#### SSL certificate

Please note that momentarily there is a problem at FirstData Connect with certain certificate types. In case no order confirmation mails are being sent out and the status of the order is still set to Pending FirstData Connect and the status then changes to Cancelled you have to switch to Yes at **Force Non SSL Notification**.

### 2.3 Optional: Professional Version - Creating a Certificate File

By working with the Professional Version of the module you can operate the transaction management directly from your shop. This way you don't need to install the certificates to access the backend. To be able to use these functions you must already have bought the Professional Version of the Module at [www.sellxed.com/shop](http://www.sellxed.com/shop). Otherwise you will not have access to these features. In order to change to the Professional Version contact us at [contact](#).

You will receive a ZIP from FirstData Connect containing a key (file extension .key) as well as the certificate (file extension .pem) in order to use the backend and the transaction management. Extract these files into a directory of your choice and carry out the following steps:

1. Open the certificate (file with the extension .pem)

2. Open the key simultaneously (file with the extension .key)
3. Insert the content of the key underneath the certificate file
4. Save the certificate file and copy it into: files\_1.x/lib/Customweb/FirstDataConnect /Certificates/Default/
5. You can now proceed to the [instructions for the installation](#).

## 2.4 Activating the Payment Methods and Testing

Further information regarding the configuration of the payment methods and the meaning of the specific settings can be found [here](#). When you have activated and configured the payment methods you can run a test by means of the published [Test data](#) in the manual. If all tests were successful, switch the operating mode in the main module to **Live**.

## 3 Module Installation and Update in the Magento Shop

### 3.1 Installation

At this time you should already be in possession of the module. Should this not be the case, you can download the necessary files in your customer account in the [sellxed shop](#) (Menu "My Downloads Downloads"). In order to install the module in your shop, please carry out the following steps:

1. Download the plugin. The download can be found in your sellxed.com account under "My Downloads".
2. Unzip the archive you have just downloaded.
3. In the unzipped folder navigate to the folder "files"
4. For some shops there are different versions of the plugin provided. If this is the case open the folder which corresponds to your shop version.
5. Using your preferred FTP client upload **entire content** of this folder into the root directory of your shop. For some shops there is a specific folder containing the plugins. If that is the case upload the plugin into this folder. Make sure that the folders aren't replaced but merely merged.
6. If you haven't yet done so, log back into your shop.

In the following you will find the installation manual for Magento 1 as well as Magento 2

#### 3.1.1 Magento 1

##### Compiler Cache / Caching

Before you start the installation or after doing an update of the module, please make sure, that the compiler cache is disabled. Also make sure that you cleared the cache otherwise it could be that the settings page is not visible.

1. Create a back-up of your shop.
2. Extract the content of the ZIP file.
3. Copy the **entire content** of the folder "files" into the main directory of the server of your shop respectively to the folder where the plugins are copied normally. In order to do so, use your usual ftp program. Make sure that the folders aren't replaced but merely merged.

#### 3.1.2 Magento 2

Im Folgenden werden die Schritte für die Installation und das Update der Extensions erklärt.

### 3.1.2.1 Installations Requirements

Bitte beachten Sie, folgende Voraussetzungen sind für den Betrieb von Magento 2 zwingend zu erfüllen:

1. System requirements von Magento (<http://devdocs.magento.com/guides/v2.0/install-gde/system-requirements.html>)
2. Der Cron Job muss korrekt eingerichtet sein, sonst können keine Extensions installiert werden. Weitere Informationen finden Sie hier: <http://devdocs.magento.com/guides/v2.0/config-guide/cli/config-cli-subcommands-cron.html>

### 3.1.2.2 Installation

For the installation of the plugin in your Magento 2 store please follow these steps:

#### 1. Readiness Check

Before uploading the plugin it is necessary to do the Readiness Check for Magento 2

1. 1. Save [this script](#) as cw-setup.php on your computer.
2. 2. Upload this cw-setup.php Script into the root directory of your Magento 2 installation.
3. 3. Access your server via SSH and run this command: `php cw-setup.php`
4. 4. The script will present you with additional commands which you need to execute.

#### About the cw-setup.php script

The provided script generates a set of commands which should be executed to clean up Magento 2. The script itself doesn't execute anything. It only generates the necessary commands.

#### 2. Upload

Upload the content of the folder **files\_2** into the root directory of your server. Execute the commands provided by the cw-setup.php script again.

## 3.2 Updates and Upgrades

You have direct and unlimited access to updates and upgrades during the duration of your support contract. In order to receive constant information about available updates we ask you to subscribe to our RSS feed that we publish for your module.

More information regarding the subscription of this RSS feed can be found under: [http://www.sellxed.com/en/updates\\_upgrades](http://www.sellxed.com/en/updates_upgrades).

We only recommend an update if something doesn't work in your shop, if you want to use new feature or if there is a necessary security update.

### 3.2.1 Update Checklist

We ask you to strictly comply with the checklist below when doing an update:

1. Always do a backup for your database and your files in your shop
2. Use always a test system to test the update process.
3. Wait until all the files are copied to the shop, clear the cache if there is one in your shop and then visit the configuration page of the main module so that the update process will be initialized.

#### Do not do updates directly in the live environment

Please test the update procedure first in your test shop. Our support team is able and willing to help you if you experience problems with the update process. However, if you decide to perform the update directly in your live shop there is the possibility of a downtime of the shop of more than two days depending on the availability of our support if you do not want to book our [complementary support](#).

Depending on the version it could be that the database has to be migrated. We recommend you therefore, to perform the updates in times when the shop is not visited too frequently by your customers.

### 3.2.2 Update Instructions

Please always read the update instruction. Those instructions can be found in the changelog. If there are no special remarks, you can proceed by just overwriting the files in your system.

#### 3.2.2.1 Magento 1

1. Download the newest version of the plugin. The download is available in your sellxed.com account under "My Downloads".
2. Extract the ZIP file.
3. Upload the folder **files\_1** into the root directory of your shop.
4. Clear the Magento cache

#### 3.2.2.2 Magento 2

1. Download the newest version of the plugin. The download is available in your sellxed.com account under "My Downloads".
2. Extract the ZIP file.
3. Upload the folder **files\_2** into the root directory of your shop.
4. Clear the Magento cache

## 3.3 Database Migration

This section describes how you can run the database migration script

This only needs to be done if your Magento installation shows error messages regarding missing tables or columns in the database.

### 3.3.1 Magento 1

Clear the Magento cache

If this does not resolve the issue, remove the entry `firstdataconnectcw_setup` from the `core_resource` table and clear the cache again.

### 3.3.2 Magento 2

From the command line run the following command:

```
php bin/magento setup:upgrade
```

## 4 Module Configuration in the Magento Shop

The configuration consists of two steps. The first step is the configuration of the main module with all the basic settings (cf. [Configuration of the Main Module](#)). During the second step you can then carry out individual configurations for each [payment method](#). This allows for full flexibility and perfect adaptation to your processes.

### Create backups!

Please create a backup of the main directory of your shop. In case of problems you will then always be able to return your shop to its original state.

We furthermore recommend testing the integration on a test system. Complications may arise with third party modules installed by you. In case of questions, our support is gladly at your disposal.

### 4.1 Configuration of the Main Module

#### 4.1.1 Magento 1

The settings for the main module can be found under **System > Configuration > FirstData Connect**. Enter the various options, some of which you have already specified in the configuration with FirstData Connect. Information on the functionalities as well as the impact of the individual settings can be found directly by the option.

The field "Time-Out for pending Payments" defines after how many minutes the order status should switch from pending to cancelled (0 means that nothing should be changed) if no successful feedback concerning the payment is received from FirstData Connect. This might occur e.g. if the customer has closed his or her browser. Further information on this topic can be found under [Order Status](#).

#### 4.1.2 Magento 2

You will find the settings of the main module via **Stores > Configuration > Sales > FirstData Connect > General**.

Fill in the fields according to the configuration of FirstData Connect or with the data which you received directly from FirstData Connect. You can find more exact explanations regarding each option in the help text by the input boxes.

## Shop



<b>Kunden Alias Management</b>	Nein	[STORE VIEW]
	Sie können Ihren Kunden gestatten ihre Aliasse auf ihrem Konto zu verwalten/löschen.	
<b>Benachrichtigung abwarten</b>	Nein	[WEBSITE]
	Es kann in einigen Fällen ein paar Sekunden dauern bis die Transaktion erfolgreich genehmigt wird. Wenn diese Option aktiviert ist, wird die Benachrichtigung erwartet.	

## General



<b>Betriebsmodus</b>	Test Modus	[STORE VIEW]
	If the test mode is selected the test account id is used. Otherwise the configured live account id is used.	
<b>Live account ID</b>		[STORE VIEW]
	The live account ID as given by the <a href="#">Salesway</a> .	
<b>Live API password</b>		[STORE VIEW]
	The live API password as given by <a href="#">Salesway</a> .	
<b>Test Account ID</b>		[STORE VIEW]
	The test account ID as given by the <a href="#">Salesway</a> . Generic test account: 401860-17795278	
<b>Test API password</b>		[STORE VIEW]
	The test API password as given by <a href="#">Salesway</a> . Password for generic test account: 8e7Yn5yk	
<b>Liability Shift Behavior</b>	Mark transactions without liability shift as uncertain	[STORE VIEW]
	If no liability shift is given by a transaction, should the transaction be marked as uncertain?	
<b>Bestell-Präfix</b>		[STORE VIEW]
	Here you can insert an order prefix. The prefix allows you to change the order number that is transmitted to <a href="#">Salesway</a> . The prefix must contain the tag {id}. It will then be replaced by the order number (e.g. name_{id}).	

**Figure 4.1:** Magento 2: Configuration of the basic module. Please note, that this is an example and the settings can differ.

## 4.2 Configuration of the Payment Method

### 4.2.1 Magento 1

After having successfully installed the main module, you will find the individual payment modules under System > Configuration > Payment Methods. You can save individual settings for each payment method and thereby optimally adapt the payment methods to your existing processes. The most central options are described in more detail further below.

#### **4.2.1.1 Direct Capturing of Invoices**

The "Invoice Creation" specifies if invoices should be captured directly or not. Captured invoices can no longer be modified. If you wish to be able to modify the ordered article for debiting, please set this option to "Deferred".

### **4.2.2 Magento 2**

After having successfully configured the main module, you will find the settings for each payment method in your shop via Stores > Sales > Payment Methods. For each payment method you can change the settings individually to optimize the payment processing in your shop.

#### **4.2.2.1 Accounting**

For each payment method you need to choose whether you want to register directly or delayed. A delayed booking only reserves the amount. Therefore it is important that you follow the instructions for such transactions as listed below. Reservations are usually only valid for a few days so we recommend to register directly. The delayed booking isn't available for every payment method.

#### 4.2.2.2 Authorization Method

For some payment methods you can choose between different authorization methods. The authorization method determines how the payment form is presented in your shop. Please note that for some authorization methods with credit cards there are extended PCI requirements. (<https://www.sellxed.com/en/blog/pci-300-changes>).

#### Logo on the Payment Page

By choosing the authorization method **Hidden Authorization**, the insertion of the credit card data occurs in your shop. This requires additional PCI Certification though.

However, if you prefer that the customer inserts the credit card data on the payment page of FirstData Connect, you have the possibility of placing your logo on said Payment Page. In order to do so, please contact FirstData Connect directly.

### 4.3 Direct Capturing of Transactions

The option "Capture" allows you to specify if you wish to debit payments directly or if you first wish to authorize them and then debit the payment at a later point.

Depending on your acquiring contract, a reservation is only guaranteed for a specific period of time. Should you fail to debit the payment within that period, the authorization may therefore no longer be guaranteed. Further information on this process can be found below.

#### Different settings between FirstData Connect and the module

It may be that settings saved in the payment modules overwrite settings saved in FirstData Connect.

### 4.4 Uncertain Status

You can specifically label orders for which the money is not guaranteed to be received. This allows you to manually control the order before shipment.

#### 4.4.1 Setting the order state

For each payment method you may select in which state the order should be set to depending on the booking state. This is the initial state of the order.

## 4.5 Optional: Validation

Note: It can be that this option is not visible in your module. In this case just ignore this section.

With the option 'Validation' you can define the moment when the payment method should be made visible to the customer during the checkout process. This setting is relevant for modules where the usage depends on the customer's compliance with specific preconditions. For example, if a solvency check has to be carried out or if the payment method is only available in certain countries. In order for the credit check or address validation to also work with European characters, the charset of the "Blowfish mode" must be set to "UTF-8" for certain PSP settings.

You have the choice between these options:

- **Validation before the selection of the payment method:** A validation verification is carried out before the customer selects the payment method. If the customer does not fulfill the requirements, the payment method is not displayed
- **Validation after selection of the payment method:** The verification of the compliance occurs after the selection of the payment method and before the confirmation of the order
- **During the authorisation:** The validation verification is carried out by FirstData Connect during the authorisation process. The payment method is displayed in any case

### 4.5.1 Usage of the Integrated Multishop Functionality of Magento

The payment module supports the multishop feature of Magento. No further modifications are necessary. The module automatically recognises the shop the order belongs to. In order for the multishop functionality to work, it is, however, necessary that the individual sub-shops within Magento have been configured correctly.

## 5 Settings / Configuration of Payment Methods

### 5.1 General Information About the Payment Methods

The plugin contains the most common payment methods. In case a desired payment method is not included per default, please contact us directly.

In order to be able to use a payment method, it must be activated in your account with FirstData Connect as well as in your shop. Information about the configuration of the payment methods can be found further above.

Below you can find important information for specific payment methods that deviate from the standard process.

### 5.2 Information on Payment Status

For each payment method you can define an initial payment status (status for authorized payments etc.). You hereby define the payment status for each state depending on the processing type of the order (captured, authorized, etc.). It's the initial status which the order assumes. Depending on the mutation carried out by you, the status can change.

#### Important info regarding Order Status

Never set the status to **Pending FirstData Connect** or any similar pending status which is implemented by the module.

#### 5.2.1 Order status "pending" / imminent payment (or similar)

Orders with the status 'pending FirstData Connect' are pending orders. Orders are set to that status if a customer is redirected in order to pay but hasn't returned successfully or the feedback hasn't reached your shop yet (Customer closed window on the payment page and didn't complete payment). Depending on the payment method these orders will automatically be transformed into cancelled orders and the inventory will be cleared (so long as the Cronjob is activated). How long this takes depends on the characteristics of the payment method and cannot be configured.

If you have a lot of pending orders it usually means that the notifications from your webserver to FirstData Connect are being blocked. In this case check the settings of your firewall and ask the Hoster to activate the IPs and User Agents of FirstData Connect.

#### 5.2.2 Order status "cancelled"

Orders with the status "cancelled" have either been set to that status automatically due to a timeout, as described above, or have been cancelled directly by the customer.

## 6 The Module in Action

Below you will find an overview of the most important features in the daily usage of the FirstData Connect module.

### 6.1 Capturing / Cancelling of Orders

#### 6.1.1 Magento 1

Please note:

The transaction management between your shop and FirstData Connect is not synchronised. If you capture payments with FirstData Connect, the status in the shop will not be updated and a second capturing in the shop is not possible.

##### 6.1.1.1 Case 1: Invoice Capturing Directly After the Order

In the following, the process is explained for the case that you have chosen to directly create the invoice after having placed the order and only authorise payments - not capture them directly - (further information on the configuration can be found under [Creating the Invoice](#)).

In order to capture the order, open the invoice and click "capture". If you click "Cancel", the authorisation will be cancelled.

##### 6.1.1.2 Case 2: Deferred Invoice Capturing

In case you have chosen the deferred invoice creation, you first have to create the invoice by clicking on the button "Invoice". Select "Capture online" below the total amount and then click on "capture invoice". The invoice has now been captured.

##### 6.1.1.3 Cancel of orders/transactions

In order to cancel a transaction you first have to open the invoice and click on the cancel button. After that open the order and click on cancel here again. This will send the cancel of the order to FirstData Connect. Please note that you need to cancel the invoice and the order.

#### 6.1.2 Magento 2

##### 6.1.2.1 Capture Bug in Magento (v. 2.0.0)

In version 2.0.0 of Magento there is a bug. It could be that invoices cannot be captured. Please make the following adjustments in the file `/vendor/magento/module-sales/Controller/Adminhtml/Order/Invoice/Capture.php`:

1. Delete the lines in the picture bellow which begin with a - .

2. Add the lines which has been marked with a + .

Here you can find the codes to be inserted in the form of a text:

```
+ )->addComment( __('The credit memo has been created automatically.'));
```

**Method:** execute()

**Diff:**

```

-     try {
-         $invoiceManagement = $this->_objectManager->get('Magento\Sales\Api\InvoiceManagementInterface');
-         $invoiceManagement->setCapture($invoice->getEntityId());
+         $invoice->capture();
+         $invoice->getOrder()->setIsInProcess(true);

```

**Figure 6.1:** Opening the Invoice

### 6.1.2.2 Performing Captures

#### Please note

The transaction management between FirstData Connect and your shop isn't synchronized. When you capture the payments at FirstData Connect , the status is not adjusted and a second capture isn't possible in your shop.

In the configuration of the payment method you can decide whether the invoice should be captured after having been created or if only the payment is authorized. You also decide if you already want to create an invoice. If you create an invoice you can't make any adjustments for the capture.

In order to capture invoices please take the following steps:

1. Open the order and create an invoice.
2. If you have set the Invoice Settlement to deferred you can still make adjustments to the invoice.
3. Click on Capture Online.

<b>Invoice Settlement</b>	Deferred settlement <span style="float: right;">▼</span>	[WEBSITE]
	Choose settlement after order in case you want an invoice to be created with your order. The state of the invoice will set according to your capture status.	
<b>Customer Address</b>	No address is sent <span style="float: right;">▼</span>	[STORE VIEW]
	Should the customer address be sent?	
<b>Capturing</b>	Deferred <span style="float: right;">▼</span>	[STORE VIEW]
	Should the amount be captured automatically after the order (direct) or should the amount only be reserved (deferred)?	
<b>Authorisation Method</b>	Payment Page <span style="float: right;">▼</span>	[STORE VIEW]
	Select the authorisation method to use in order to process this payment method.	
<b>Alias Manager</b>	Inactive <span style="float: right;">▼</span>	[STORE VIEW]
	The alias manager allows the customer to select from a credit card previously stored.	

**Figure 6.1:** Capture options

### 6.1.2.3 Cancelling / Voiding Orders

In order to issue a cancellation of the payment you must use the "Void" button. If you wish to use the "Cancel" button you must cancel the payment in the FirstData Connect backend portal.

## 6.2 Place Orders in the backend of Magento

### 6.2.1 Magneto 1

With the Magento payment module you can place orders and capture the payment directly in the shop; so called Mail Order / Telephone Order (MOTO).

1. Go to the order overview and click on "Create New Order"
2. The usual window for the creation of orders will be opened. Select the customer in question, the item and the address
3. Select the preferred payment method and click on "Submit Order".
4. Depending on the authorisation method that you have saved for the selected payment method, you will either be redirected to the Payment Page of FirstData Connect or the mask for the credit card will appear such as in the image below. Enter the credit card data of the customer.

### Mail order/telephone order authorization

---

Card holder name \*   
Please enter the card holder's name.

Card number \*   
Please enter your card number

Card expiration date \*    
Select the expiry date of your card

CVC Code \*   
Please enter the CVC code from your card. You can find the code on the back of the card

 Continue

**Figure 6.1:** MoTo Transactions in Magento

## 6.2.2 Magento 2

With the Magento payment module you can trigger orders directly from your shop, so called Mail Order / Telephone Order (MOTO).

1. Go to the overview of the order (Sales > Orders) and click on "Create New Order" at the top right.
2. The familiar window to create an order will open. Choose the desired customer, article and address.
3. In the payment method box, choose the desired payment method and click on "Finalize order".
4. After that you will be redirected either to the Payment Page of FirstData Connect or you will be asked to enter your payment information in the shop, depending on your settings.

If an alias of the customer exists, you can alternatively use that for the order.

## 6.3 Refunds

### 6.3.1 Magento 1

You can refund already captured transactions and automatically transmit them to FirstData Connect. In order to do so, open the invoice of the captured order. By clicking on "Credit Memo" the window for refunds is opened. Enter the amount you wish to refund. By clicking on "Refund" the refund is transmitted to FirstData Connect.

Below you find a step-by-step guide including screenshots:

Order View Order # 200000003 | 17.04.2014 16:40:42 Back Edit Send Email Credit Memo Hold Ship Reorder

Information Page 1 of 1 pages | View 20 per page | Total 1 records found Reset Filter Search

Invoice #	Bill to Name	Invoice Date	Status	Betrag
200000003	Thomas Lueth	17.04.2014 16:41:41	Paid	20,99 €

Figure 6.1: 1. open the invoice

Invoice #100000026 | Paid | 23.04.2014 18:52:08 (the invoice email is not sent) Back Send Email Credit Memo Print

Order # 100000043 (the order confirmation email was sent)		Account Information	
Order Date	23.04.2014 18:51:23	Customer Name	Test Test
Order Status	Processing	Email	info@customweb.com
Purchased From	Main Website Main Store English	Customer Group	General

Figure 6.1: 2. click on credit memo - Important - open the invoice first!.

Refund Totals

Subtotal	156,00 €
Refund Shipping	<input type="text" value="5"/>
Adjustment Refund	<input type="text" value="0"/>
Adjustment Fee	<input type="text" value="0"/>
<b>Grand Total</b>	<b>161,00 €</b>

Append Comments  
 Email Copy of Credit Memo

Figure 6.1: 3. Adjust the refunding amount (see more info below [Refunds Based on Quantity](#))

Refund Totals

Subtotal	156,00 €
Refund Shipping	<input type="text" value="5"/>
Adjustment Refund	<input type="text" value="0"/>
Adjustment Fee	<input type="text" value="0"/>
<b>Grand Total</b>	<b>161,00 €</b>

Append Comments  
 Email Copy of Credit Memo

Figure 6.1: 4. To process the refund click on Refund.

✔ The credit memo has been created.

Order # 100000041 | 23.04.2014 18:26:16 Back Send Email Reorder

Order # 100000041 (the order confirmation email was sent)		Account Information	
Order Date	23.04.2014 18:26:16	Customer Name	Test Test
Order Status	Closed	Email	info@customweb.com
Purchased From	Main Website Main Store English	Customer Group	General
Placed from IP	160.85.155.47		

Figure 6.1: Wait for the confirmation of the refund.

### 6.3.1.1 Refunds Based on Quantity

You can make refunds based on product quantity. In order to do so, open the credit memo window and enter the amount of products you wish to refund to your customer's card

You can carry out as many individual refunds as you wish until you have reached the quantity of the original order. The status of the order then automatically switches to **complete**.

Credit Memo #	Bill to Name	Created At	Status	Refunded
200000001	Leandra Simitovic	02.12.2013 16:42:10	Refunded	35,00 €
200000002	Leandra Simitovic	02.12.2013 16:47:03	Refunded	146,00 €

Figure 6.1: Overview of all Refunds

### 6.3.1.2 Refunding of Any Amount

As each position of the order needs to be transmitted to FirstData Connect we can't support the function **Adjustment Refund** - meaning the refund of any amount. Only whole items can be refunded by adjusting the refund amount.

#### Adjusting the amount of several refunds

It is possible to carry out several refunds on an order. Please note that you can refund a maximum of 100% of the original amount. If you have already carried out a refund you need to make sure not to refund more than the initial amount by adjusting the amount and the Adjustment Fee.

## 6.3.2 Magento 2

### 6.3.2.1 Resolving a Current Magento Bug (v. 2.0.0)

In the 2.x version of Magento there is a bug. Please make the following adjustments to the file `/vendor/magento/module-sales/Model/Order/Payment.php` :

1. Delete the lines in the picture bellow which begin with a - .
2. Add the lines which has been marked with a + .

**Method:** registerRefundNotification(\$amount)

**Diff:**

```

$creditmemo->setPaymentRefundDisallowed(
    true
)->setAutomaticallyCreated(
    true
- )->register()->addComment(
+ )->addComment(
    __('The credit memo has been created automatically.')
);

```

**Figure 6.1:** Adjustments so you are able to enter a credit memo.

Here you can find the codes to be inserted in the form of a text:

```
+ )->addComment( __('The credit memo has been created automatically.'));
```

### 6.3.2.2 Performing Credits

For registered transactions you can create credits and transmit them automatically to FirstData Connect . In order to do so open an invoice of an already registered order. By clicking on "Credit Memo" a dialog will open for the refunds. Now you can adjust the number of products which you would like to credit in the credit memo dialogue.

Here you can find each step again including screenshots:

#000000003 🔍 🔔 👤 admin ▾

---

← Back   Send Email   Credit Memo   Hold   Ship

**ORDER VIEW**

- Information
- Invoices
- Credit Memos
- Shipments
- Comments History
- Transactions

🔍
 🔼 Filters
👁 Default View ▾
⚙ Columns ▾
📄 Export ▾

Select It... ▾
1 records found
20 ▾ per page
< 1 of 1 >

<input type="checkbox"/>	Invoice ↓	Invoice Date	Order Number	Order Date	Bill-to Name	State	Amount	Action
<input type="checkbox"/>	000000003	Dec 14, 2015 7:55:37 AM	000000003	Dec 14, 2015 7:54:41 AM	Test Customweb	Paid	CHF39.00	<a href="#">View</a>

**Figure 6.1:** 1. Opening the Invoice

## New Memo for #000000003

admin ▾

[← Back](#)
[Reset](#)

### Order & Account Information

#### Order # 000000003 (The order confirmation email was sent)

Order Date	Dec 14, 2015, 7:54:41 AM
Order Status	Processing
Purchased From	Main Website Main Website Store Default Store View
Placed from IP	212.90.201.186

#### Account Information

Customer Name	Guest
Email	info@customweb.com
Customer Group	NOT LOGGED IN

### Address Information

#### Billing Address [Edit](#)

Test Customweb  
 Teststrasse 2  
 Zürich, Zug, 8032  
 Switzerland  
 T: 555466684

#### Delivery address [Edit](#)

Test Customweb  
 Teststrasse 2  
 Zürich, Zug, 8032  
 Switzerland  
 T: 555466684

**Figure 6.1:** 2. Click on Credit Memo - Important the invoice needs to be opened first.

**Refund Totals**

	Subtotal	156,00 €
	Refund Shipping	<input type="text" value="5"/>
	Adjustment Refund	<input type="text" value="0"/>
	Adjustment Fee	<input type="text" value="0"/>
	<b>Grand Total</b>	<b>161,00 €</b>

Append Comments  
 Email Copy of Credit Memo

**Figure 6.1:** 3. Choose which products you would like to credit and click on Refund Online.

#000000003

🔍 🔔 👤 admin ▾

← Back   Send Email   Credit Memo   Hold   Ship

**ORDER VIEW**

Information

Invoices

Credit Memos

Shipments

Comments History

Order History

Transactions

🔍
Filters
👁️ Default View ▾
⚙️ Columns ▾
📄 Export ▾

Select It... ▾
0 records found
20 ▾ per page
⏪
1 of 1
⏩

	Credit Memo	Created	Order	Order Date	Bill-to Name	State	Refunded	Action
We couldn't find any records.								

**Figure 6.1:** Overview of all the credits made

## Adjusting the amounts for several refunds

It is possible to issue several credits on one order. Please note that you can't credit more than 100% of the original amount. If you have already issued a credit you will need to make sure you don't credit more than the original amount, by adjusting the amount and the Adjustment Fee.

## 6.4 Useful Transaction Information on the Order

### 6.4.1 Magento 1

In each order, processed via our module, you can find an overview of the most important information about the transaction as well as a transaction history.

Payment Information		
<b>Authorisation amount</b>	161.0000	
<b>Currency</b>	CHF	
<b>Payment method</b>	MasterCard	
<b>Payment ID</b>	23679571	
<b>Captured amount</b>	161	
<b>Transaction authorised</b>	Yes	
<b>Transaction uncertain</b> 	No	
<b>Transaction captured</b>	Yes	
<b>Transaction paid</b>	Yes	
<b>Alias</b>	XXXXXXXXXXXX0007 (12/13)	
<b>Alias Token</b>	8B1974E9-59EB-442C-A1D4-34BEC568EE23	
<b>Acceptance</b>	test123	
<b>Card number</b>	XXXXXXXXXXXX0007	
<b>Card expiry date</b>	12/13	
<b>Merchant reference</b>	sellxed_og_100000087	
Transaction history		
Date	Action	Message
2013-09-12 12:53:50	authorization	The amount of 161.00 is authorized.
2013-09-12 12:53:50	capturing	The amount of 161.00 is captured.
Order was placed using CHF		

Figure 6.1: Transaction Information.

## 6.4.2 Magento 2

In each order, which was processed by our module, you will find an overview of the most important information on the transaction and transaction history.

## Payment & Shipping Method

### Payment information



Visa

Transaction ID	14
Authorisation Amount	107
Currency	CHF
Payment period	Visa
Payment ID	h1ElhGAKOSCitASfe0IbOShnndA
Test Transaction <span>?</span>	Yes
Transaction authorised	Yes
Transaction uncertain <span>?</span>	No
Transaction paid	Yes
Card Type	Saferpay Test Card
Effective Payment Method Name <span>?</span>	SaferpayTestCard
Authorisation Method	PaymentPage
3D Secure	Successful

### Shipping & Handling Information

Flat Rate - Fixed CHF10.00

Dec 14, 2015 11:08:14 AM | Authorization  
 The amount of 107.00 is authorized. (Customer successfully returned from the Saferpay payment page.)

The order was placed using CHF.

Figure 6.1: Transaction Information.

## 6.5 Usage of the Alias Managers / Token Solution

### 6.5.1 Magento 1

With the Alias Manager, your customers can securely save their credit cards with FirstData Connect for later purchases. You can enable this by activating the option "Alias Manager" in the configuration of the [Payment Method](#). The customer can then choose from their saved credit cards without having to enter all the details again.

**Visa**

Card N°: 9451 1231 0000 0111 Date of Expiry: 12/2015 CVV: 123

**Saved cards:**

xxxx xxxx xxxx 0111

You may choose from one of the cards previously used on this site.

**Card holder name \***

Test Alias

Please enter the card holder's name.

**Card number \***

xxxx xxxx xxxx 0111

Please enter your card number

**Card expiration date \***

12 2015

Select the expiry date of your card

**CVC Code \***

Please enter the CVC code from your card. You can find the code on the back of the card

**Figure 6.1:** Alias Manager Transaction

## Attention

To use the Alias Manager tit may be necessary to activate certain options in your FirstData Connect account. Please contact FirstData Connect directly to do so.

### 6.5.1.1 Deleting Customer Aliases

You can easily delete a customer's alias by opening the customer in the backend of Magento. Switch to the tab FirstData Connect Alias and delete the saved alias directly here.



**Figure 6.1:** Delete previously saved aliases of your customers.

### 6.5.2 Magento 2

Due to the integration of the Alias Manager the customers credit card data can be saved for later purchases. The customer can choose between the cards that have already been saved and won't have to enter all of credit card data again.

### 6.5.2.1 Activating the Alias Manager / Token

In order for you to be able to use this you will need activate the option "Alias Manager" in the payment methods.

#### Payment

Check / Money order

Test Payment Method

VISA

Hans Muster  
 Beispielstrasse 1  
 Zürich, Zürich 8000  
 Switzerland  
 044 123 45 67  
[Edit](#)



#### Stored Cards

xxxxxxxxxxxx0002

You may choose one of your stored cards.

#### Card holder name \*

Hans Muster

Please enter the card holder's name.

#### Card number \*

xxxxxxxxxxxx0002

Please enter your card number.

#### Expiry Date \*

05 2018

Select the expiry date of your card.

#### CVC Code \*

Please enter the CVC code from your card. You can find the code on the back of the card.

**Place Order**

#### Order Summary

Cart Subtotal	CHF28.00
<b>Order total</b>	<b>CHF28.00</b>
2 Items in Cart <span style="float: right;">^</span>	
<div style="display: flex; align-items: center;"> <div style="flex-grow: 1;"> <p>LifeLong Fitness IV</p> <p>Qty: 2</p> </div> <div style="text-align: right; flex-grow: 0 0 100px;"> <p>CHF28.00</p> </div> </div>	

**Figure 6.1:** Alias Manager Transaction

### 6.5.2.2 Customers Deleting the Token

In Magento 2 you can allow your customers to manage the aliases in their customer account at "My FirstData Connect Aliases / Token". This feature can also be enabled in the settings of the payment method

<b>Customer Alias Management</b>	Yes	[STORE VIEW]
	You can allow the customers to manage/delete their aliases in their account.	
<b>Await Notification</b>	Yes	[WEBSITE]
	In some cases it may take a few seconds until the transaction is successfully authorized. When this option is enabled, the notification is awaited.	
<b>External Checkout: Guest Checkout</b>	Show Account Selection	[WEBSITE]
	When using an external checkout, the customer can either be asked to choose an option to authenticate (as guest, register or login) or he can always be checked out as guest. For the second option to work, guest checkout has to be enabled in Magento.	

Figure 6.1: Activating the Alias Manager for Customers.

## 6.6 Tax Calculation Settings

### 6.6.1 Magento 1

To ensure that the taxes are calculated correctly and transmitted correctly to a third party invoice provider inside Magento please make sure that you set the calculation settings in the menu under System > Configuration > Tax as showed in the screenshot below.

Calculation Settings		
Tax Calculation Method Based On	Total	[WEBSITE]
Tax Calculation Based On	Shipping Address	[WEBSITE]
Catalog Prices	Excluding Tax	[WEBSITE]
	▲ Whether catalog prices entered by admin include tax.	
Shipping Prices	Excluding Tax	[WEBSITE]
	▲ Whether shipping amounts entered by admin or obtained from gateways include tax.	
Apply Customer Tax	Before Discount	[WEBSITE]
Apply Discount On Prices	Including Tax	[WEBSITE]
	▲ Apply discount on price including tax is calculated based on store tax, if "Apply Tax after Discount" is selected.	
Apply Tax On	Custom price if available	[WEBSITE]
Enable Cross Border Trade	No	[WEBSITE]
	▲ When catalog price includes tax, enable this setting will fix the price no matter what the customer's tax rate is.	

Figure 6.1: Recommended tax calculation settings for Magento.

Please also make sure that inside the settings of your promotion in the tab "Actions" the discount is not applied to the shipping amount as Magento is not correctly transmitting the tax rate there.

## 6.7 OneStepCheckout

### 6.7.1 Magento 1

The checkout of Magento can be modified and reduced to one step. The so called OnePageCheckout. Our modules support the most important OnePageCheckout extensions. If you are thinking of using a OneStepCheckout extension in combination with our FirstData Connect Magento, please make sure that you are using one of the following:

- OneStepCheckout by [www.onestepcheckout.com](http://www.onestepcheckout.com)
- OneStepCheckout by [Ahead Works](#)
- LightCheckout by [GoMage](#)
- Firecheckout by [Templates Master](#)

### 6.7.2 Magento 2

There is no official support for any OnePageCheckout module for Magento 2.

## 6.8 Setup a Cron Job to Activate the Timed Operations

### 6.8.1 Magento 1

To activate the timed operations of the plugin (e.g. update service, deleting pending orders, etc.) make sure that you set up the Magento Cron engine. Especially the update function allows you to automatically retrieve additional information or changes of your order directly via the API of FirstData Connect. Please note it could be that in order to use the update feature it may be necessary that FirstData Connect activates additional options in your account.

The module uses the standard cron engine of Magento. More information regarding the set up can be found [here](#).

Here we suggest you use a Cron Engine like for example [EasyCron](#). This allows you to open the file (URL) with an external service.

### 6.8.2 Magento 2

The module uses the standard cron engine of Magento 2. More information regarding the set up can be found [here](#).

## 6.9 Magento 1 API Manual

Via API, our module provides plenty of information on a transaction. The following section describes which calls are possible and what information is provided.

## 6.9.1 General Information on Using the API

General information on using the Magento SOAP API can be found here: <http://www.magentocommerce.com/api/soap/introduction.html>

## 6.9.2 API Calls

This overview shows the API Versions and which API Calls they support.

### 6.9.2.1 API V1

- `$client->call($session, 'firstdataconnectcw_transaction.list');` //List of all transactions
- `$client->call($session, 'firstdataconnectcw_transaction.info', {transactionsId});` // Single Transaction

### 6.9.2.2 API V2

- `$client->firstdataconnectcwTransactionList($session);` //List of all transactions
- `$client->firstdataconnectcwTransactionInfo($session, {transactionsId});` //Single Transaction

### 6.9.2.3 XML-RPC

- `$client->call('call', array($session, 'firstdataconnectcw_transaction.list');` //List of all transactions
- `$client->call('call', array($session, 'firstdataconnectcw_transaction.info', {transactionsId}));` //Single Transaction

### 6.9.2.4 REST

- `$this->callApi('firstdataconnectcw/transactions');` //List of all transactions
- `$this->callApi('firstdataconnectcw/transactions/{transactionsId}');` //Single Transaction

## 7 Testing

Before switching from test to live mode it is important that you test the module extensively.

### Testing

Do not forget to switch the operating mode from test to live after having successfully tested the module.

### 7.1 Test Data

In the following section you can find the test data for the various payment methods:

#### MasterCard

Card number	5404 1070 0002 0010
Expiry Date	12/2020
CVC	123

#### Visa

Card number	4921 8180 8989 8988
Expiry Date	12/2020
CVC	123

#### Credit / Debit Card

Card number	4921 8180 8989 8988
Expiry Date	12/2020
CVC	123

Card number	5404 1070 0002 0010
Expiry Date	12/2020
CVC	123

## 8 Errors and their Solutions

You can find detailed information under <http://www.sellxed.com/en/fag>. Should you not be able to solve your problem with the provided information, please contact us directly under: <http://www.sellxed.com/en/support>

### 8.1 Module is not shown

If the module is not shown even though the files have been downloaded onto the server correctly, please check the following:

- The local.xml can be found in the /app/etc directory
- Make sure `disable_local_modules` is set to `,false'`

### 8.2 The Referrer URL appears in my Analytics Tool

When a customer and the notification are redirected via Header Redirection, the FirstData Connect Referrer URL might appear in your Analytics Tool thus hiding the original traffic source. However, most Analytic Tools are able to minimize this problem.

In case you are using Google Analytics as reporting tool, this step by step guide may help you to exclude the URLs: [under bullet point 4](#).

## 9 Compatibility with Third-Party Plugins

The plugins listed below are compatible with our payment modules and allow you to handle certain tasks in a easier way.

### 9.1 Magento 1

#### 9.1.1 Fees and discounts within Magento

To configure a FirstData Connect payment gateway based fee and discount, you will need the following 3rd-Party plugin.

- [Fooman Surcharge](#)

### 9.2 Birthday and gender in Magento 1

For certain payment service providers it is necessary to check the birthday an the gender of a customer. Magento 1 does not check this by default. this check can be enabled under "Go to System > Configuration | Customers > Customer Configuration > Name and Address Options".

### 9.3 Birthday and gender in Magento 2

For certain payment service providers it is necessary to check the birthday an the gender of a customer. Magento 2 does not check this by default. this check can be enabled under "Stores > Configuration | Customers > Customer Configuration > Name and Address Options".

## 10 Error Logging

The module will log different unexpected errors or information depending on the configured level. If there is any issue with the module, this log can help identify the cause.

### 10.1 Log Levels

You can configure the log level in the FirstData Connect settings. The store log setting does not affect these log messages.

- Error: Logs unexpected errors only. (Default)
- Info: Logs extended information.
- Debug: Logs information helpful for debugging.

### 10.2 Log Location

The log file is stored in the Magento log directory. (Default Path: {shopRootDirectory}/var/log)

# 11 Advanced Information

This section of the manual is for advanced usage of the module. The content is for advanced users with special requirements. Everything in this section is optional and not required for the daily usage of the module.

## 11.1 Transaction Object

This section describes how to extract information from a transaction, if you need it for further processing. E.g. you require more information of the transaction for further processing an order in your ERP system.

The code snippets in this section assume your script resides in the root folder of the shop with the default shop folder structure.

### 11.1.1 Magento 1

Initialize the shops core functions.

```
define('MAGENTO_ROOT', getcwd());
$mageFilename = MAGENTO_ROOT . '/app/Mage.php';
require_once $mageFilename;
Mage::setIsDeveloperMode(true);
ini_set('display_errors', 1);
umask(0);
Mage::app();
```

Now you can load the transaction and then extract the transactionObject.

Load the transaction object by Id:

```
$dbtransaction = Mage::getModel('firstdataconnectcw/transaction')->load($transactionId);
$transactionObject = $dbtransaction->getTransactionObject();
```

Load the transaction object by Order Number:

```
$dbtransaction = Mage::getModel('firstdataconnectcw/transaction')->load($orderId, 'transaction_external_id');
$transactionObject = $dbtransaction->getTransactionObject();
```

### 11.1.2 Magento 2

Initialize the shops core functions.

```
use Magento\Framework\App\Bootstrap;
require __DIR__ . '/app/bootstrap.php';
$bootstrap = Bootstrap::create(BP, $_SERVER);
$obj = $bootstrap->getObjectManager();
```

```
$state = $obj->get('Magento\Framework\App\State');  
$state->setAreaCode('frontend');
```

Get the transaction factory.

```
$factory = $obj->get  
( 'Customweb\FirstDataConnectCw\Model\Authorization\TransactionFactory' )-  
>create();
```

Now you can load the transaction and then extract the transactionObject.

Load the transaction object by Id:

```
$dbTransaction = $factory->load($transactionId, 'entity_id');  
$transactionObject = $dbTransaction->getTransactionObject();
```

Load the transaction object by Order Number:

```
$dbTransaction = $factory->load($orderId, 'order_id');  
$transactionObject = $dbTransaction->getTransactionObject();
```

Load the transaction object by Payment Id:

```
$dbTransaction = $factory->load($paymentId, 'payment_id');  
$transactionObject = $dbTransaction->getTransactionObject();
```