Installation Manual for FirstData Connect Magento

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

Version: 3.0.301
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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

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 check-list 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 informations 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; otherwise the payment feedback of FirstData Connect might not get through to the shop.
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):


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. 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 download 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 shops 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 this 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 that you have downloaded in your sellxed.com account.
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.

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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 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.

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 back up 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. They can be found on the plugin page in the shop under the section change log on the lower end of the page. 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
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 back-ups!

Please create a back-up 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.
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 Shop ID

In the case of a multi-store set up (cf. chapter: Multi-Store), the parameter Shop ID identifies the shop's request and, therefore, redirects the feedback of FirstData Connect based on the shop ID.
4.4 Order Prefix

With the option order prefix you can define your own order scheme for the transmission to FirstData Connect. This option helps you identify to which shop a transaction the back-end of FirstData Connect is related to. The tag "{id}" will automatically be replaced by the consecutive order number.

4.5 Selecting the Authorisation Method

You can choose between two options of authorizing credit card payments. By selecting one of the two under the option 'Authorisation Methods', you define how you want to process the individual payment methods.

Further information on the various authorisation methods can be found on our sellxed website.

Payment Processing

Please pay attention to the fact that you require the activation of further options with FirstData Connect in order to use some of the authorisation methods.

It may be that certain authorization methods are not available for every payment method.

Alongside the introduction of PCI 3 there are additional certification requirements in case you are using the authorization method Hidden or AJAX. Please contact FirstData Connect for further information or switch to another authorization method.

4.6 Direct Capturing of Transactions

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

Depending on your acquiring contract, a reservation is only guaranteed for a specific amount of time. Should you fail to debit the payment within that period, the authorisation 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.

4.7 Uncertain Status Status

You can specifically label orders for which for example no 3D-Secure verification nor any other security mechanism was carried out. This allows you to manually control the order before shipment.
4.8 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. 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 he or she 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.

4.9 Multi-Shop Set-Up

The payment module is designed for the usage of one FirstData Connect contract for several shops. It must be differentiated, however, between the case of an integrated multi-shop functionality and independent shops:
Licensing

In the case of independent shops, you require a payment module license for each shop. For scale prices, please contact us directly.

4.9.1 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

All sellxed payment modules are delivered with 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 webservice 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 over 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:

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

**Method: execute()**

```php
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.
Figure 6.1: Capture options

6.2 Place Orders in the Back-End of Magento

6.2.1 Magento 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.
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:
Figure 6.1: 1. open the invoice

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

3. Adjust the refunding amount (see more info below Refunds Based on Quantity)

4. To process the refund click on Refund.

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 Window](image)

**Figure 6.1:** Overview over 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:

```php
 créditmemo->setPaymentRefundNotAllowed(
     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:

```php
+ )--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:

**Figure 6.1:** 1. Opening the Invoice
**Figure 6.1:** 2. Click on Credit Memo - Important the invoice needs to be opened first.

**Figure 6.1:** 3. Choose which products you would like to credit and click on Refund Online.
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 the sellxed module, you can find an overview over the most important information about the transaction as well as a transaction history.
6.4.2 Magento 2

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

Figure 6.1: Transaction Information.
6.5 Usage Abo Commerce / Recurring Payments

6.5.1 Magento 1

Abo-Commerce increases long-term customer loyalty. Customers can choose as many products as they wish and have them ordered in cycles of their choice. The advantage for customers: products that are required regularly are automatically delivered to their home.

If you wish to offer recurring payments with Magento, you can use our extension that we've developed for you. The module can be purchased directly in our shop. Please refer to the attached manual for the configuration of the module.
6.5.2 Magento 2

It is not possible to create recurring payments for Magento 2.

6.6 Usage of the Alias Managers / Token Solution

6.6.1 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.

![Alias Manager Transaction](image)

**Figure 6.1:** Alias Manager Transaction

**Attention**

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

6.6.1.1 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.

6.6.2 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.

6.6.2.1 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.
6.6.2.2 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.

![Figure 6.1: Activating the Alias Manager for Customers.]

6.7 Tax Calculation Settings

6.7.1 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.
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.

### 6.8 OneStepCheckout

#### 6.8.1 Magento 1

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

- 1neStepCheckout by [www.onestepcheckout.com](http://www.onestepcheckout.com)
- OneStepCheckout by [Ahead Works](http://www.aheadworks.com)
- LightCheckout by [GoMage](http://www.gomage.com)
- Firecheckout by [Templates Master](http://www.templatesmaster.com)

#### 6.8.2 Magento 2

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

### 6.9 Set-up a cron job to activate the timed operations

#### 6.9.1 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.

6.9.2 Magento 2

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

6.10 Magento 1 API Manual

Via API, the sellxed modules provide plenty of information on a transaction. The following section describes which calls are possible and what information is provided.

6.10.1 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

6.10.2 API Calls

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

6.10.2.1 API V1

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

6.10.2.2 API V2

- $client->firstdataconnectcwTransactionList($session); //List of all transactions
- $client->firstdataconnectcwTransactionInfo($session, [transactionsId]); //Single Transaction

6.10.2.3 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

6.10.2.4 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. You can find all relevant test credit card data under: http://www.sellxed.com/de/testen.

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 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/faq. 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 an 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 and 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 and 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.

```php
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:

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

Load the transaction object by Order Number:

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

11.1.2 Magento 2

Initialize the shops core functions.

```php
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();