

Installation Manual for Viveum OpenCart

This manual describes the installation and usage of the Viveum extension for OpenCart.

Release Date: Tue, 03 May 2022 11:24:51 +0200
Version: 3.0.177

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

E-Mail: 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 Tue, 03 May 2022 11:24:51 +0200

#####conditional#####

Table of Contents

1	Introduction	6
1.1	Procedure of the Installation	6
1.2	System Requirements	7
2	Configuration Viveum - Backend	8
2.1	Tab: Global Transaction Parameters	8
2.1.1	Default operation code and default data capture procedure	8
2.1.2	Payment Retry	8
2.1.3	Processing for Individual Transactions	8
2.2	Tab: Global Security Parameters	8
2.2.1	Hashing Method	9
2.3	Tab: Payment Page	9
2.4	Tab: Data and Origin Verification	9
2.4.1	Checks for e-commerce & Alias Gateway	10
2.4.2	Checks for Viveum DirectLink and Viveum Batch (Automatic)	10
2.5	Tab: Transaction Feedback	10
2.5.1	HTTP Redirection in the Browser	10
2.5.2	Direct HTTP-Server-to-Server-Request	10
2.5.3	Dynamic e-Commerce Parameters	12
2.5.4	Dynamic Parameters	12
2.5.5	Security for Request Parameters	12
2.5.6	HTTP Request for Status Changes	13
2.5.7	Dynamic Parameters	13
2.6	(Dynamic-)Template	14
2.7	Hidden Authorisation, Ajax Authorization (FlexCheckout - Hosted Tokenization Page), External Checkout & Alias Manager	14
2.7.1	Preconditions	14
2.7.2	Setting Up an API-User	16
2.7.3	Usage of External Checkouts	16
3	Module Installation and Update in the OpenCart Shop	18
3.1	Installation	18
3.2	Updates and Upgrades	18
3.2.1	Update Checklist	18
3.2.2	Update Instructions	19
4	Module Configuration in the OpenCart Shop	20
5	OpenCart 3.0 Installation - Additions	21

5.1	Configuration of the Main Module	21
5.2	Defining the URL for the Transaction Feedback	21
5.3	Configuration of the Payment Module	21
5.4	Direct Capturing of Transactions	22
5.5	Uncertain Status	22
5.5.1	Setting the order state	22
5.6	Optional: Validation	22
5.6.1	Usage of several independent OpenCart shops	23
6	Settings / Configuration of Payment Methods	24
6.1	General Information About the Payment Methods	24
6.2	Information on Payment Status	24
6.2.1	Order status "pending" / imminent payment (or similar)	24
6.2.2	Order status "cancelled"	24
6.3	Usage Hidden Authorisation / Alias Gateway	25
6.4	Credit Card	25
6.5	PayPal	26
6.6	Usage of the Ajax Authorization (FlexCheckout)	26
7	The Module in Action	27
7.1	Useful Transaction Information on the Order	27
7.2	Usage of the Alias Managers / Token Solution	27
7.3	Dynamic Template	28
7.4	Capturing / Cancelling of Orders	29
7.4.1	Capturing Orders	29
7.4.2	Cancel Orders	30
7.5	Refunding Orders	31
7.6	Setup a Cron Job to Activate the Timed Operations	32
8	Testing	33
8.1	Test Data	33
9	Errors and their Solutions	34
9.1	The Referrer URL appears in my Analytics Tool	34
10	Compatibility with Third-Party Plugins	35
10.1	Birthday and gender in OpenCart	35
11	Error Logging	36
11.1	Log Levels	36

- 11.2 Log Location 36
- 12 Advanced Information 37**
- 12.1 Transaction Object 37

1 Introduction

This manual explains the installation, configuration and usage of the payment module for OpenCart and Viveum. It is important that you strictly follow the described steps. Only by doing so, a secure usage in compliance with all security regulations can be guaranteed.

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

- PSPID & Password. You receive these credentials from Viveum after conclusion of contract. Our support staff is happy to help you acquiring a Viveum contract if you do not yet have one.
- OpenCart payment module from sellxed.com/shop
- FTP access to your server
- Login credentials for your shop

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

1.1 Procedure of the Installation

1. Configuration of the administration interface of Viveum.
2. Upload of the module
3. Configuration of the [basic settings](#) of the [payment module](#)
4. Configuration of the **payment methods**
5. Carrying out a test purchase by means of the attached [test data](#) at the end of this document
6. If the test was successful, copy all data from your test account into the Viveum live account.

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 Viveum might not get through to the shop.

1.2 System Requirements

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

- PHP Version: 5.4.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.

In case you are using OpenCart version 3.0.3.5 or 3.0.3.6, you must patch your store to fix the twig extension error in order for modified templates to be loaded. The following extension can be used to resolve the issue: https://www.opencart.com/index.php?route=marketplace/extension/info&extension_id=40469.

2 Configuration Viveum - Backend

For the configuration, log into the Viveum backend:

- Test Environment: <https://viveum.v-psp.com/ncol/test/backoffice>
- Live Environment: <https://viveum.v-psp.com/ncol/prod/backoffice>

The settings carried out on the following pages are a precondition for the [configuration of the main module](#).

The configuration of the settings is done under **Configuration > Technical Information**. In the following chapter the chapter titles correspond to the tabs in the back office of Viveum. For some parts screenshots will be added for a more precise illustration. Should a specific setting not be mentioned then it has no importance for the configuration of the payment module and can be ignored by you as such.

2.1 Tab: Global Transaction Parameters

Under the tab Global Transaction Parameters you define the basic settings for the processing of transactions.

2.1.1 Default operation code and default data capture procedure

We recommend choosing **Sale** and **"Automatic data capture by our system at the end of the day"**. All incoming payments will be directly processed and debited. If you are using transaction management and deferred capturing we strongly advise to use these settings. In case you have saved different settings in the module, then the module's settings will overwrite those of the Viveum.

2.1.2 Payment Retry

We recommend entering **10**.

2.1.3 Processing for Individual Transactions

We recommend the option **"Online but switch to offline when the online acquiring system is unavailable"**.

2.2 Tab: Global Security Parameters

Here you define the security parameters for the interaction between your shop and the gateway of Viveum.

2.2.1 Hashing Method

The sellxed payment modules support all hashing methods. In order for the module to function, it is crucial that the settings saved with Viveum correspond to those made in the backend of your shop.

In order to guarantee a smooth processing of payments, we recommend the following hashing methods:

- Each parameter, followed by the pass phrase. It may be that this parameter is not visible in your shop. In this case it is transmitted automatically.
- Hash Algorithm = SHA 512
- Character Encoding = UTF-8

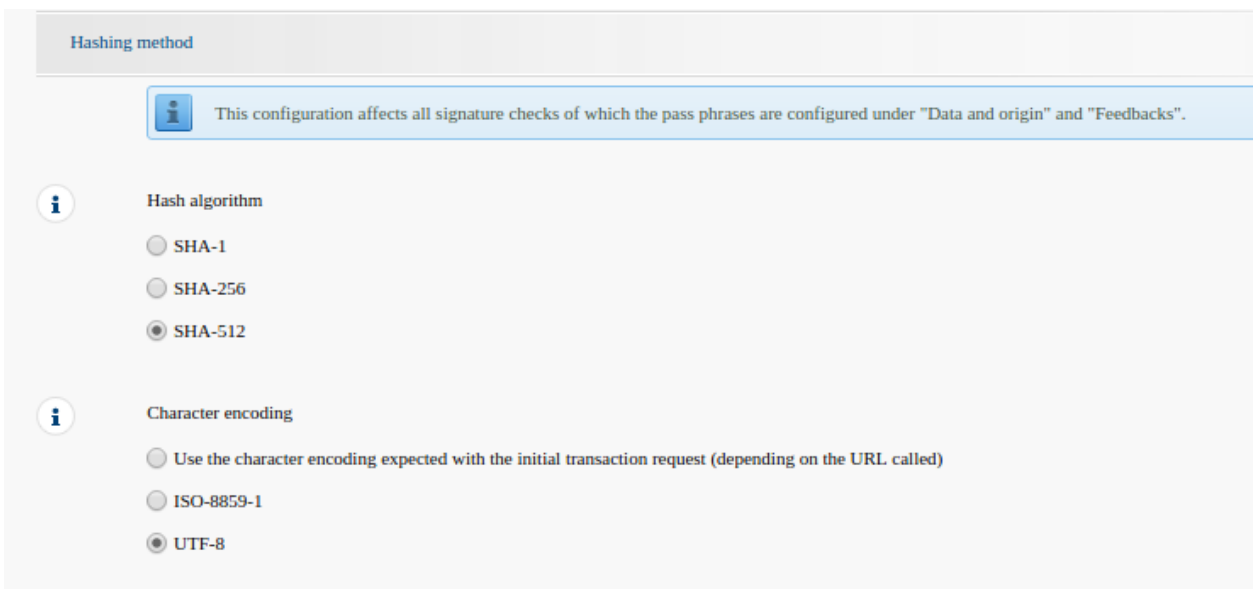


Figure 2.1: Configuration of the SHA-Hash.

These settings must be identical to the settings in the main module (cf. [Configuration of the main module](#)). Please note that the character encoding in our modules is set to UTF-8 per default and cannot be changed.

2.3 Tab: Payment Page

The checkbox under **Cancel Button** should be ticked. The field under Back Button Redirection can be left empty.

2.4 Tab: Data and Origin Verification

The tab Data and Origin Verification defines security elements concerning the transmission of data and the loading of the payment page.

2.4.1 Checks for e-commerce & Alias Gateway

The first box under "URL of the merchant page" can remain empty.

The box "SHA-IN pass phrase" is a security element of the payment verifying its authenticity. Therefore it is important that you use the same pass phrase in the back end and in the shop.

Customweb SHA-String Generator

Please note that only ASCII characters may be used for SHA pass phrases. Please use our [SHA pass phrase generator](#) so that you do not enter invalid characters.

2.4.2 Checks for Viveum DirectLink and Viveum Batch (Automatic)

DirectLink allows you to use the Hidden Authorisation (Alias Gateway) as well as the direct debiting of transactions within your shop. If you have activated DirectLink in your account and wish to use this feature, enter **the same** SHA-IN pass phrase in the box "SHA-IN pass phrase" as above.

Further information on the configuration of DirectLink can be found under [Configuration Hidden Authorisation](#).

2.5 Tab: Transaction Feedback

In the tab Transaction Feedback the response of Viveum to the shop is controlled.

2.5.1 HTTP Redirection in the Browser

The parameters in the transaction feedback determine the processing in the shop after payment has been completed. However, the four fields for "HTTP Redirection in the Browser" can remain **empty** because they will be configured through the settings of our module.

Un-tick the option "I would like Viveum to display a short text to the customer on the secure payment page if a redirection to my website is detected immediately after the payment process."

2.5.2 Direct HTTP-Server-to-Server-Request

- The "Timing of the Request" must be set to **Online but switch to a deferred request when the online requests fail**. As "Request Method" you must select "POST".
- In the section **General** make sure that the Option: "I would like Viveum to display a "processing" message to the customer during payment processing." is **un-ticked** too.
- Copy here the URL that is listed in the module backend under: **Extensions > Modifications > Modules > Viveum Base Module > Edit > More > Setup**.

URL on which the merchant wishes to receive a deferred HTTP request, should the status of a transaction change offline.

For the **Transaction Feedback** please enter the URL that is generated in the main module. More information can be found under the section [Transaction Feedback](#)

All orders have the status 'Pending'

Should you notice during the tests that orders are not registered in the shop and that no confirmation email is sent, this might be due to a failure of the transaction feedback. Make sure that your firewall is not blocking any request coming from Viveum.

Direct HTTP server-to-server request

i Timing of the request

No request.
 Always deferred (not immediately after the payment).
 Always online (immediately after the payment to allow customisation of the response seen by the customer).
 Online but switch to a deferred request when the online requests fail.

i URL of the merchant's post-payment page

If the payment's status is "accepted", "on hold" or "uncertain".

SEE MANUAL FOR THIS URL // URL GEMÄSS MANUAL

If the payment's status is "cancelled by the client" or "too many rejections by the acquirer".

SEE MANUAL FOR THIS URL // URL GEMÄSS MANUAL

Request method

POST
 GET

Figure 2.1: Configuration of the feedback URL for the HTTP-Feedback.

Deferred Requests und Time Out

Viveum sends the notification requests with a time out of 20 sec. Should your shop not respond to the HTTP Request within this time, a time out error will be sent. If you set the option to **Online but switch to a deferred request when the online requests fail** the request will be retrieved four times in ten minute intervals.

Please note that, depending on your Viveum subscription, it is possible that the only option available is **Always online (immediately after the payment to allow customization of the response seen by the customer)**. In this case, always select this option.

2.5.3 Dynamic e-Commerce Parameters

With this option you control which parameters are sent in the response from Viveum. In order for payments to effectively be evaluated in your shop, all necessary parameters must be sent. It is possible that you have other options available to select. Just make sure that you move every parameter from **available** to **selected** except for the following:

- PM
- CN
- SUBBRAND
- AAVADDRESS
- AAVCHECK
- AAVMAIL
- AAVNAME
- AAVPHONE
- AAVZIP

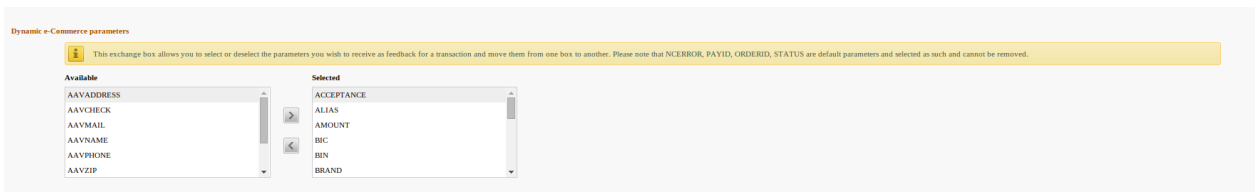


Figure 2.1: Configuration of the Dynamic E-Commerce Parameters. Your selection may look differently depending on your subscription with Viveum.

2.5.4 Dynamic Parameters

With this option you control which parameters are sent in the response from Viveum. In order for payments to effectively be evaluated in your shop, all parameters must be sent. It is possible that you have other options available to select. Just make sure that you move **every** parameters from **available** to **selected**.

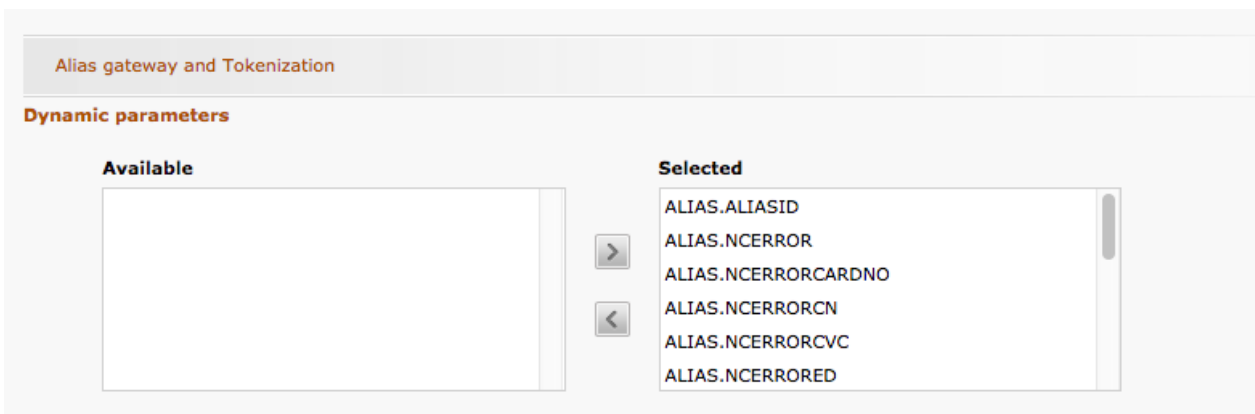


Figure 2.1: Configuration of the Dynamic Parameters. Your selection may look differently depending on your subscription with Viveum.

2.5.5 Security for Request Parameters

The box "SHA-OUT pass phrase" is an additional safety mechanism for payments. Here too must the entered pass phrase be identical to the one in your shop. However, please make sure that your SHA-OUT pass phrase differs from the SHA-IN pass phrase. .

Customweb SHA-String Generator

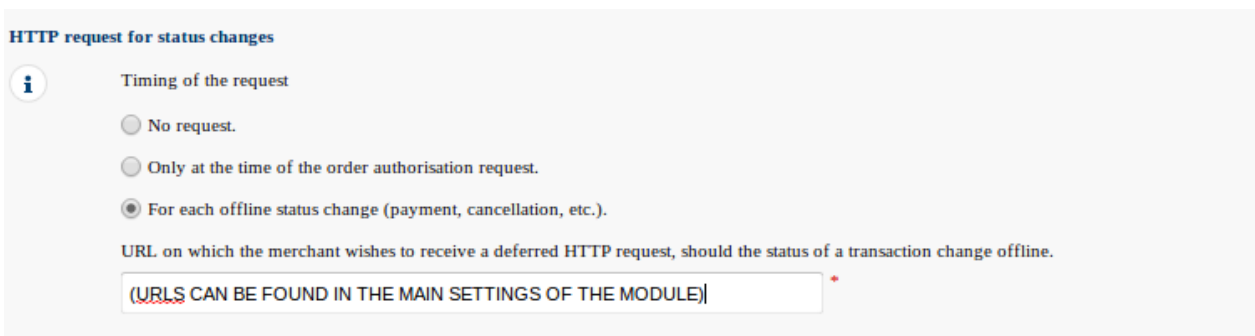
Please note that only ASCII characters may be used for SHA pass phrases. Please use our [SHA pass phrase generator](#) so that you do not enter invalid characters.

2.5.6 HTTP Request for Status Changes

You have the option to be informed about status changes by Viveum directly. This feature is especially useful when a payment has an uncertain status because the acquirer system could not be reached. The payment status will be updated automatically. Furthermore this feature allows you to capture payments inside Viveum and have synchronize them with your shop

In order to use this feature you will have to select the option **For each offline status change (payment, cancellation, etc.)**. Afterwards just copy the URL into the field that is displayed in the Setup of your Main configuration: **Extensions > Modifications > Modules > Viveum Base Module > Edit > More > Setup**.

Enter the URL shown there into the field 'URL on which the merchant wishes to receive a deferred HTTP request, should the status of a transaction change offline.'



HTTP request for status changes

i Timing of the request

- No request.
- Only at the time of the order authorisation request.
- For each offline status change (payment, cancellation, etc.).

URL on which the merchant wishes to receive a deferred HTTP request, should the status of a transaction change offline.

Figure 2.1: Enter the URL from the Setup of the Main Configuration.

2.5.7 Dynamic Parameters

Move all parameters from **available** to **selected**.

2.6 (Dynamic-)Template

You can now find the option template via **Configuration > Template**. The Dynamic Template enables you to design the payment mask for the credit card data so it matches your web shop. Should the field for the dynamic template not be visible, please contact Viveum. It may be that you have to activate additional options in your account.

For the usage of the dynamic template, please save the following settings:

- Enable JavaScript on template: **'No'**
- Our modules do not allow "usage of static template". So click 'No'
- Allow usage of dynamic template: **'Yes'**
- In case you are using the dynamic template, enter the host name, i.e. `https://Your-Shop.com` in the lower box. The upper one must remain empty.

Figure 2.1: Configuration of the Dynamic Template.

Dynamic Template

Please note that you require an SSL certificate for the usage of the dynamic template. Otherwise the CSS-Resources will not be reloaded in certain browsers which might lead to layout issues.

The activation of the dynamic template in the shop is explained [here](#).

2.7 Hidden Authorisation, Ajax Authorization (FlexCheckout - Hosted Tokenization Page), External Checkout & Alias Manager

2.7.1 Preconditions

For the usage of the Hidden Authorization, Ajax Authorization (FlexCheckout), Alias Manager or External Checkout during the payment processing, certain adjustments are necessary in the backend of Viveum. Please check first if the options are activated in your account under **Account > Your Options**.

Other options

Available options Premium Default options

ID	Option	Activation	Monthly fee	Transaction/Unit cost	Status	
AFTP	AFTP Module	0 CHF	0 CHF	0 CHF	Active	Deactivate
D3D	D3D (Direct Link 3D)	0 CHF	0 CHF	0 CHF	Active	Deactivate
ELVDE	ELV (Direct Debits Germany)	0 CHF	0 CHF	0 CHF	Active	Deactivate Configuration
FAQQ	Foreign acquirers	0 CHF	0 CHF	0 CHF	Active	Deactivate
INV	Invoice appearance	0 CHF	0 CHF	0 CHF	Active	Deactivate
NPMA2	Foreign payment methods (fees per payment method activated) - CH	0 CHF	0 CHF	0 CHF	Active	Deactivate
OPC	One Page Checkout	0 EUR	0 EUR	0 EUR	Active	Deactivate
RECO1	Reconciliation Module	0 CHF	0 CHF	0 CHF	Active	Deactivate
RECX	Alias Manager	0 CHF	0 CHF	0 CHF	Active	Deactivate Configuration
SCH	Scheduled Payments	0 CHF	0 CHF	0 CHF	Available	Activate
SUB	Subscription manager	0 CHF	0 CHF	0 CHF	Active	Deactivate
USR4	User Manager up to 20 users	0 CHF	0 CHF	0 CHF	Active	Deactivate Configuration
USR5	User Manager up to 50 users	0 CHF	0 CHF	0 CHF	Available	Activate
USR6	User Manager up to 100 users	0 CHF	0 CHF	0 CHF	Available	Activate
USR7	User Manager up to 200 users	0 CHF	0 CHF	0 CHF	Available	Activate

(1) CAP1 : Includes transaction fee for 3-D Secure transactions

Figure 2.1: Make sure to activate the OPC and DPR options.

If an option is not available please contact Viveum.

Options and their Meanings:

- For the usage of the Hidden Authorization you require the option **OnePageCheckout (OPC)**.
- For the usage of the Ajax Authorization (FlexCheckout) you require the option **OnePageCheckout (OPC)** and **DirectLink (DPR)**.
- If you additionally want to use the Alias Manager, you also need the option **Alias Manager (RECX)**.

In case these options are not be available, please contact Viveum directly.

2.7.2 Setting Up an API-User

If you want to use the features of the transaction management or the hidden authorization (Alias Gateway) you will need to set up an API user as described hereafter:

Go to **Configuration > User Administration** and click on 'New User'. Choose a **User ID** and insert a user name of your choice and your e-mail address. Select **Administrator without user manager** as a profile. It is furthermore important that you select the option **Special user for API (no access to the administration)**. If you do not see this option, you will need to let Viveum activate the option DirectLink for your account.

Password of the API-User

The User ID and the API-user password may only contain letters and numbers as well as special characters. The following special characters are not allowed: & (Ampersand), " (double quotes), ' (single quotes)

Note down the access data. They will have to be inserted in the respective place in the [configuration of the main module](#).

2.7.3 Usage of External Checkouts

For the usage of external checkouts there are additional options required. External checkouts, such as MasterPass are payment methods, which offer the possibility to transfer addresses automatically.

The usage of the external checkouts asks for the option Direct Link and for the activation of payment method in your account.

For the performance of the payment method, you have to make sure that under Technical Information > Transactionfeedback in the section Direct Link all parameters selected are shifted

The screenshot shows a web interface for configuring 'Directlink'. At the top, there is a 'Directlink' tab. Below it, the section 'Dynamic parameters' is active. A blue information box contains the text: 'This exchange box allows you to select or deselect the parameters you wish to receive as feedback for a transaction and such and cannot be removed.' Below this, there are two columns: 'Available' and 'Selected'. The 'Available' column is currently empty. The 'Selected' column contains a list of parameters: AAVADDRESS, AAVCHECK, AAVMAIL, AAVNAME, AAVPHONE, and AAVZIP. Between the two columns are two arrow buttons: a right-pointing arrow and a left-pointing arrow. At the bottom left of the interface, there is a 'SAVE' button.

Figure 2.1: Response Parameter for Direct Link.

3 Module Installation and Update in the OpenCart 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.

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 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.

4 Module Configuration in the OpenCart 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.

5 OpenCart 3.0 Installation - Additions

In order to guarantee smooth operations and the usage of all features please make sure that you follow the instructions below.

5.1 Configuration of the Main Module

You will find the settings for the main module under "**Extension > Modules > Viveum Base Module**". Install the module by clicking **Install**.

By clicking **Edit** you can configure the main module. Enter all data in the corresponding fields. Each option is, furthermore, explained in short info texts in the shop.

5.2 Defining the URL for the Transaction Feedback

To ensure correct payment processing in your shop, at least one Feedback URL has to be provided in the Viveum configuration. The URL to be entered can be found in your OpenCart Shop under: **___setupForm___ > Setup**

5.3 Configuration of the Payment Module

After having successfully configured the main module, you can find the settings for the individual payment methods in your shop under **Extensions > Payments**. Each payment method is listed individually. Install the payment methods you wish to offer to your customers. You can carry out 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.

By clicking on **Install** the payment method is activated in your shop. Click **Edit** in order to modify the configuration of the payment method.

5.4 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 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 authorisation may therefore no longer be guaranteed. Further information on this process can be found below.

Different settings between Viveum and the module

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

5.5 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.

5.5.1 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.

5.6 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 Viveum during the authorisation process. The payment method is displayed in any case

5.6.1 Usage of several independent OpenCart shops

In case you wish to connect several independent shops to one contract with one contract with Viveum, you require a sellxed payment module for each shop as well as the corresponding multi-shop module which you will find directly by the payment module.

1. Extract the multi-shop module and open the file "router.php"
2. Enter a shop ID of your choice in the box "Shop ID" within the main configuration of the module (e.g. shop_a and shop_b)
3. Enter the following line into the corresponding place within the file router.php of the multi-shop module (for each shop shop_a and shop_b):
`$redirect['shop_a'] = 'https://www.your-shop.com/index.php?route=viveumcw/process/notify';`
4. Enter the URL below (instead of the URL mentioned above) under the point "Feedbacks" in the backend of Viveum: **`http[s]://yourshop.com/router.php`**
5. Copy the file router.php into the main directory of your shop

6 Settings / Configuration of Payment Methods

6.1 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 Viveum 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.

6.2 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 Viveum** or any similar pending status which is implemented by the module.

6.2.1 Order status "pending" / imminent payment (or similar)

Orders with the status 'pending Viveum' 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 Viveum are being blocked. In this case check the settings of your firewall and ask the Hoster to activate the IPs and User Agents of Viveum.

6.2.2 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.

6.3 Usage Hidden Authorisation / Alias Gateway

You have the possibility of processing credit cards without redirection to the payment page of Viveum.

In order to be able to use this feature, you must first carry out the steps listed under [Hidden Authorisation / Alias Gateway](#) and create an API-User.

You can then activate the authorisation method 'Hidden Authorisation' for the payment methods of your choice. This procedure requires you as a merchant to fulfill the PCI-SAQ-A-EP. At no time is any credit card data saved on your server. Contact your Acquirer for more information about the SAQ and the requirements.

6.4 Credit Card

For the integration you have the choice between the pre-selection in the shop; i.e. the customer chooses the card type already in the shop; or a generic integration in which case the customer only sees the option 'credit card' as a payment method and then chooses the card type on the payment page Viveum.

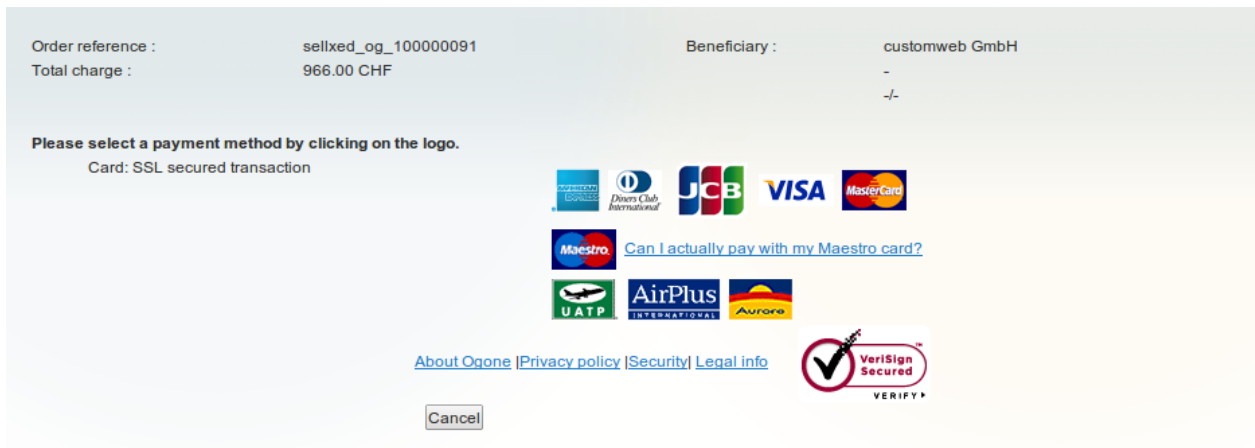


Figure 6.1: No pre-selection of the card type - the type will then be chosen on the payment page.

Pre-Selection of the Payment Method

We recommend choosing the option pre-selection. This allows you to configure individual settings for each payment method and add payment fees to the various methods.

6.5 PayPal

You can process PayPal directly via Viveum. In order to do so, however, some adjustments to your PayPal account are required. Please carry out the following steps:

1. Activate the payment module in your shop
2. Make sure that the payment method is activated in your Viveum account
3. The API adjustments must be carried out in your PayPal account. The various steps are explained in the "PayPal Express Checkout Integration Guide". This document can be found in your PSP account under: Support > Integration and User Guides > Technical Guides > Viveum PayPal Express Checkout Integration Guide .

6.6 Usage of the Ajax Authorization (FlexCheckout)

You have the possibility of processing credit cards without redirection to the payment page of Viveum.

In order to be able to use this feature, you must first carry out the steps listed under [Hidden Authorisation, FlexCheckout \(Hosted Tokenization Page\), External Checkout und Alias Manager](#) and create an API-User.

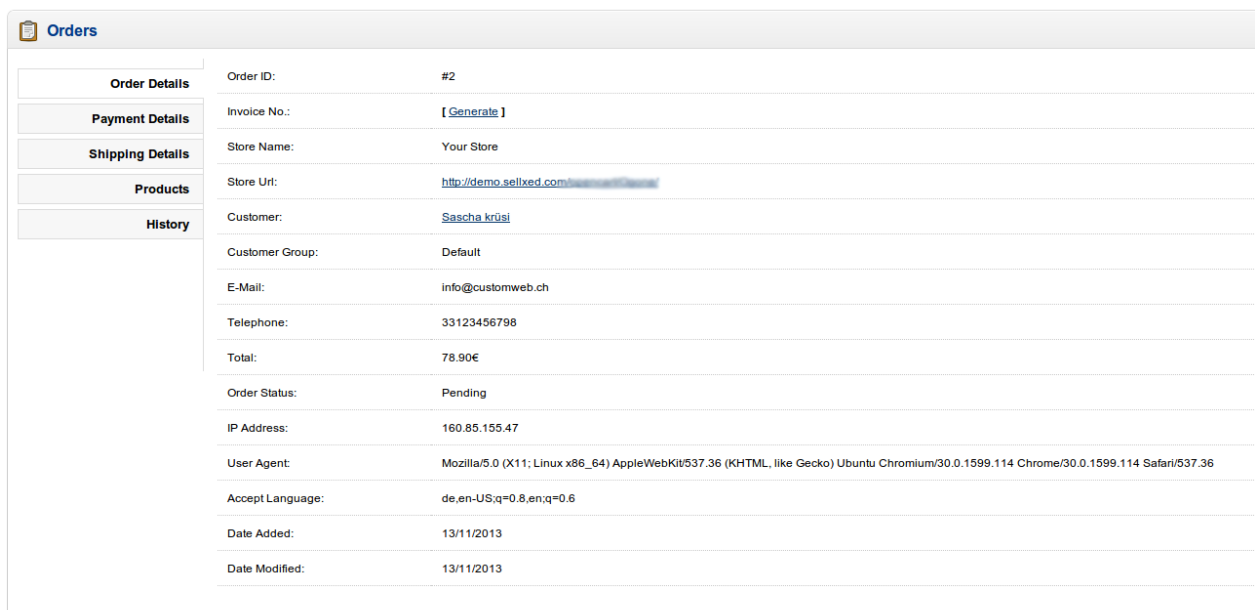
You can then activate the authorisation method 'Ajax Authorization (FlexCheckout)' for the payment methods of your choice. At no time is any credit card data saved on your server.

7 The Module in Action

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

7.1 Useful Transaction Information on the Order

You can find an overview of the transaction information in within the order detail view. Among others, this information allows for the definite attribution of the orders to their corresponding transaction, seen in the backend of Viveum.



Orders	
Order Details	Order ID: #2
Payment Details	Invoice No.: [Generate]
Shipping Details	Store Name: Your Store
Products	Store Url: http://demo.sellxed.com/
History	Customer: Sascha Krüsi
	Customer Group: Default
	E-Mail: info@customweb.ch
	Telephone: 33123456798
	Total: 78.90€
	Order Status: Pending
	IP Address: 160.85.155.47
	User Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Ubuntu Chromium/30.0.1599.114 Chrome/30.0.1599.114 Safari/537.36
	Accept Language: de,en-US;q=0.8,en;q=0.6
	Date Added: 13/11/2013
	Date Modified: 13/11/2013

Figure 7.1: Transaction Information in OpenCart.

7.2 Usage of the Alias Managers / Token Solution

With the Alias Manager, your customers can securely save their credit cards with Viveum 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 his or her saved credit cards without having to re-enter all the details.

Use Stored Card

Card Holder Name*
Please enter here the card holder name on the card.

Card Number*
Please enter here the number on your card.

Card Expiration*
Select the date on which your card expires.

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

Figure 7.1: Alias Manager

Alias Manager Options

The usage of the Alias Managers requires the activation of the correct option with Viveum. To do so, please contact the support directly.

7.3 Dynamic Template

We provide a standard skin for the usage of the dynamic template for all sellxed modules. You can activate the option by setting the option "Dynamic Template" to "Use Shop Template" in the main module. Please make sure that all settings specified under [Template](#) have been carried out in the backend of Viveum.

The Dynamic Template allows you to load the Payment Page of Viveum in the layout of your shop. The customer, therefore, does not notice that the customer has been forwarded to the website of Viveum. The template dynamically adjusts to your shop template. This, furthermore, allows you to easily integrate Mobile Skins (cf. Screenshots).

The Dynamic Template requires an SSL Certificate

In order for the Dynamic Template to work correctly with all browsers, you require an SSL certificate in your shop.

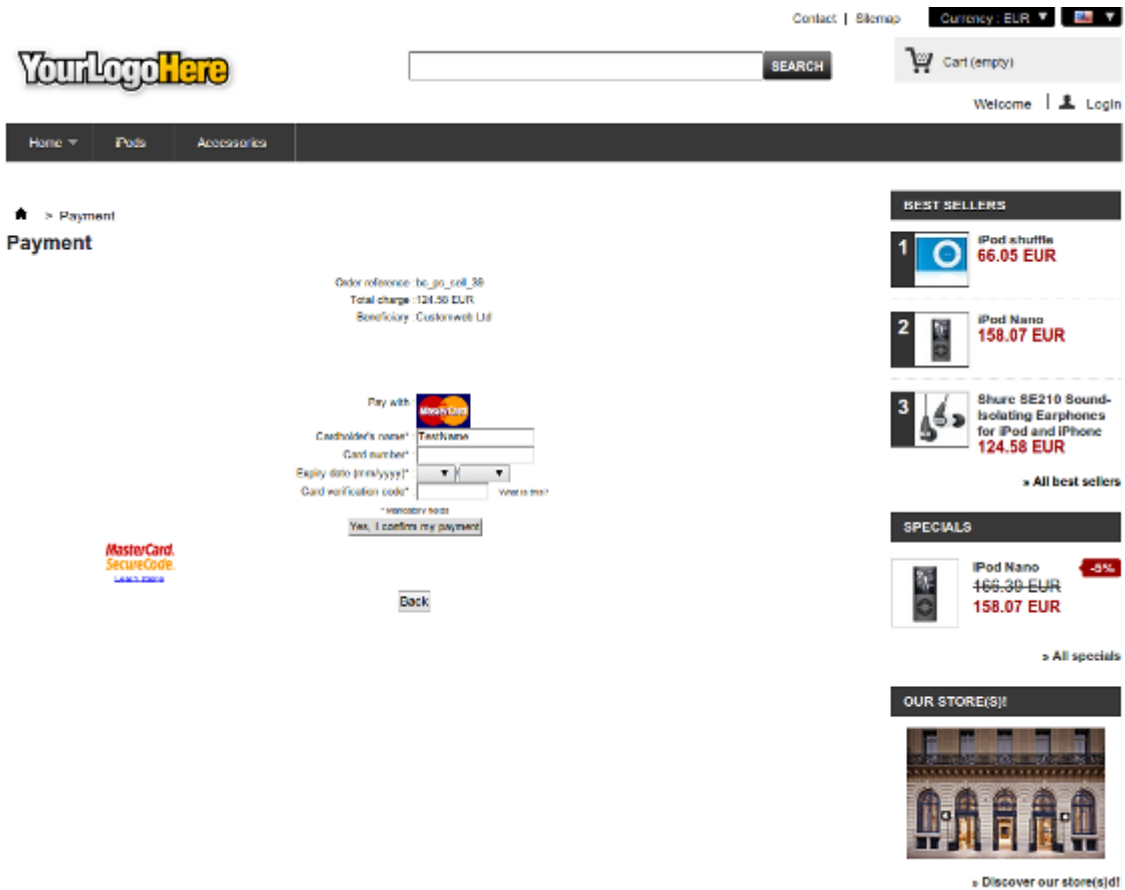


Figure 7.1: Example: The skin adapts to the layout of your shop.

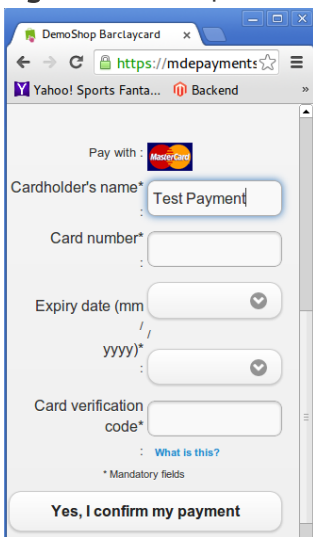


Figure 7.1: Example: Dynamic Template with mobile skin

7.4 Capturing / Cancelling of Orders

7.4.1 Capturing Orders

In order to capture orders, open the transaction manager under Sales > Viveum Transactions. Here you will find an overview of all transactions. Search for the order in the field with the order numbers. By clicking "view" you will open the transaction of the order.

7.4.1.1 Capturing Complete Orders or Partial Capturing

By clicking the button "Capture Transaction" a new window opens up. You can now capture every item individually in case you do not wish to send all items at once. The amount of possible partial captures depends on your contract. Please contact Viveum directly in order to clarify questions.

Capturing of Orders in the backend of Viveum

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

In case you do not wish to capture all items of an order, you can close the transaction by clicking the box.

PARTIAL CAPTURE

With the following form you can perform a partial capture.

Name	SKU	Type	Tax Rate	Quantity	Total Amount (excl. Tax)	Total Amount (incl. Tax)
iPhone	product 11	product	0 %	<input type="text" value="1"/>	<input type="text" value="74.24"/>	<input type="text" value="74.24"/>
Flat Shipping Rate	shipping	shipping	0 %	<input type="text" value="1"/>	<input type="text" value="3.68"/>	<input type="text" value="3.68"/>
Total Capture Amount:						77.91 EUR

Close transaction for further captures

[Capture](#)

Figure 7.1: Capturing of Orders

Partial Capturing

Please find out if the capturing of partial amounts is supported by your Viveum contract. If this is not the case, it might happen that the transaction is closed for further transactions after a partial capture.

7.4.2 Cancel Orders

By clicking "Cancel Transaction", the transaction is **cancelled** and the reserved amount on your customer's card is released automatically.

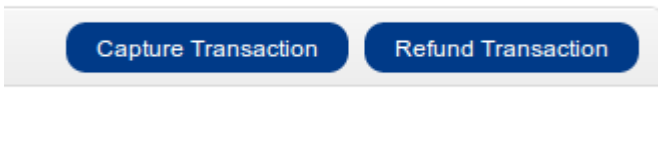


Figure 7.1: Capture or Cancel in OpenCart.

7.5 Refunding Orders

In order to refund orders, open the transaction information (cf. above).

You can refund individual items or any amount of your choice by modifying the total amount or the item quantity.

PARTIAL REFUND

With the following form you can perform a partial refund.

Name	SKU	Type	Tax Rate	Quantity	Total Amount (excl. Tax)	Total Amount (incl. Tax)
iPhone	product 11	product	0 %	<input type="text" value="1"/>	<input type="text" value="74.24"/>	<input type="text" value="74.24"/>
Flat Shipping Rate	shipping	shipping	0 %	<input type="text" value="1"/>	<input type="text" value="3.68"/>	<input type="text" value="3.68"/>
Total Refund Amount:						77.91 EUR

Close transaction for further refunds

Figure 7.1: Refunds in OpenCart for Viveum.

Maximal Refund

With our module it is not possible to refund more than 100% of the originally authorised amount.

Executing a refund will not change the status of the order.

7.6 Setup a Cron Job to Activate the Timed Operations

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

In order to use the timed operations, please schedule a cron job in your server to the following controller:

`https://www.your-shop.com/index.php?route=viveumcw/cron/cron`

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

8 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.

8.1 Test Data

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

Credit / Debit Card

Card number	3750 0000 000 0007	American Express
Expiry Date	12/2020	
CVC	1234	
Card number	5399 9999 9999 9999	Mastercard
Expiry Date	12/2020	
CVC	123	
Card number	4111 1111 1111 1111	VISA (Without 3-D Secure Check)
Expiry Date	12/2020	
CVC	123	
Card number	4000 0000 0000 0002	VISA (With 3-D Secure Check)
Expiry Date	12/2020	
CVC	123	

American Express

Card number	3750 0000 000 0007	American Express
Expiry Date	12/2020	
CVC	1234	

MasterCard

Card number	5399 9999 9999 9999	Mastercard
Expiry Date	12/2020	
CVC	123	

Visa

Card number	4000 0000 0000 0002	VISA (With 3-D Secure Check)
Expiry Date	12/2020	
CVC	123	
Card number	4111 1111 1111 1111	VISA (Without 3-D Secure Check)
Expiry Date	12/2020	
CVC	123	

9 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>

9.1 The Referrer URL appears in my Analytics Tool

When a customer and the notification are redirected via Header Redirection, the Viveum 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](#).

10 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.

10.1 Birthday and gender in OpenCart

For certain payment service providers it is necessary to check the birthday and the gender of a customer. OpenCart does not check this by default.

How to enable gender and birthday checks in your shops checkout

1. Add two new custom fields to your checkout via your shops backend under "Customers > Custom Fields"
2. Modify the order context getters to return the value of your custom checkout field from the order / session (or wherever the previous step saves the data).

Order Context Getters

- AbstractOrderContext
- getBillingDateOfBirth()
- getBillingGender()

These functions can be found in "system/library/cw/Viveum/AbstractOrderContext.php".

11 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.

11.1 Log Levels

You can configure the log level in the Viveum settings.

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

11.2 Log Location

The log file is stored in the default log folder of OpenCart. The path is configured in the config.php of your shop system. (Default Path: {shopRootDirectory}/system/logs or {shopRootDirectory}/system/storage/logs)

12 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.

12.1 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.

In your script initialize the base of OpenCart.

Opencart 3.x

```
require_once('config.php');
require_once(DIR_SYSTEM . 'startup.php');
// Registry
$registry = new Registry();

// Config
$config = new Config();
$config->load('default');
$config->load('catalog');
$registry->set('config', $config);
$loader = new Loader($registry);
$registry->set('load', $loader);
$registry->set('db', new DB($config->get('db_type'), $config->get(
('db_hostname'), $config->get('db_username'), $config->get(
('db_password'), $config->get('db_database'), $config->get('db_port')));
```

Include the module specific files and set registry.

```
require_once DIR_SYSTEM.'library/cw/init.php';
require_once DIR_SYSTEM.'library/cw/ViveumCw/Util.php';
require_once DIR_SYSTEM.'library/cw/ViveumCw/Entity/Transaction.php';
ViveumCw_Util::setRegistry($registry);
```

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

Load the transaction by Id:

```
$transactionById = ViveumCw_Entity_Transaction::loadById($transactionId);
$transactionObject = $transactionById->getTransactionObject();
```

Load transactions by Order ID:

```
$transactionsByOrderId = ViveumCw_Entity_Transaction::
getTransactionsByOrderId($orderId);
foreach($transactionsByOrderId as $transaction){
    $transactionObject = $transaction->getTransactionObject();
    //Do something with each object
}
```