



Payment module integration for OpenCart 3

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1. RELEASE NOTES

Version	Date	Comment
4.0.0	7/30/2018	Initial version.

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2. MODULE FEATURES

- Immediate payment
- payment in installments,
- multi-language compatibility,
- multi-currency compatibility,
- selective 3D-Secure depending on the order amount,
- automatic redirection to the shop at the end of payment,
- definition of a minimum/maximum amount for each payment method,
- configuration of the order status in case of success, failure and cancellation,
- notify the buyer in case of declined payment or cancellation,
- systematic registration of orders at the end of payment via a silent URL (Instant Payment Notification URL).

3. READ CAREFULLY BEFORE GOING ANY FURTHER

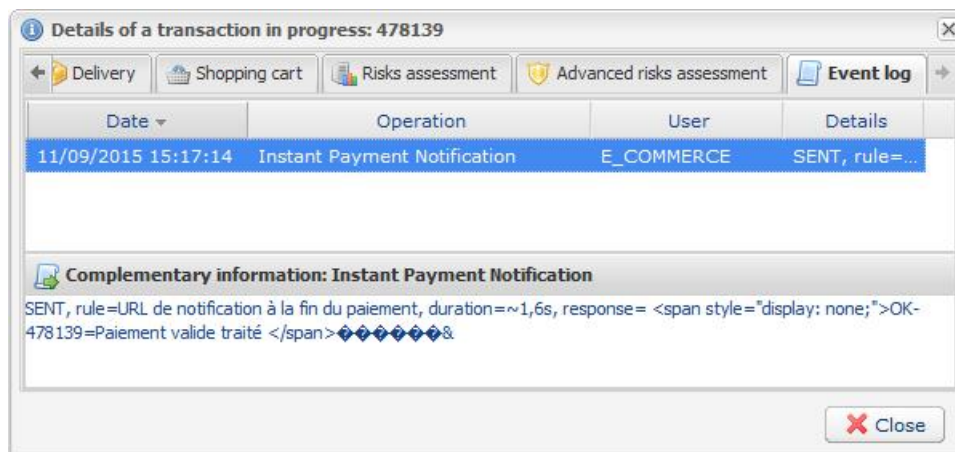
The most frequent error concerns the Instant Payment Notification URL. The Instant Payment Notification URL is the only way the PayZen gateway can notify you at the end of your payment. The chapter **Setting up the end of payment notification** must be read thoroughly and the provided instructions must be respected. It is essential to understand the difference between the Instant Payment Notification URL and the return URL which is called only if the buyer clicks on "Return to shop".

Common mistakes:

- **If your OpenCart shop is in maintenance mode**
- **If your Instant Payment Notification URL is protected by an .htaccess file**
- **If you have blocked the IP addresses of the payment gateway**
- **If you have not coded the Instant Payment Notification URL within the Back Office PayZen**

How to check that the Instant Payment Notification URL has been called:

In the PayZen Back Office, display the payment details (double click) and select the «**Event log**» tab.



4. INSTALLMENT PAYMENT FEATURES

This module also allows you to offer the possibility to pay in installments. In module settings, you can choose the number of installments and the delay in days between each installment.

This module will allow you to view an order in your OpenCart Back Office with the total amount that has been paid using the "payment in 3 installments with no fees" module, for instance.

During the first installment payment, an authorization request for the amount of the first installment is sent (if the capture date is before the current date + 6). Therefore, you cannot be sure that the upcoming installments will be honored. Remember to check that the upcoming installments are authorized.

Starting from the second installment, the IPN is no longer called, as OpenCart does not support such notifications for finalized orders. It is needless to resend the IPN from the Back Office.

Additional feature implemented into this module

For installment payments, the PayZen payment gateway allows to also choose the amount of the first installment.

Example:

For an amount of 100 EUR paid in 3 installments, you can set the percentage of the first installment at 50% of the total amount. This means that the amount of the first installment will be 50EUR and the amount of the two other installments will be 25 EUR.

Payment method view

In module settings, you can define the minimum amount starting from which you wish to offer installment payment.

You can also set up the maximum amount until which you wish to offer installment payment.

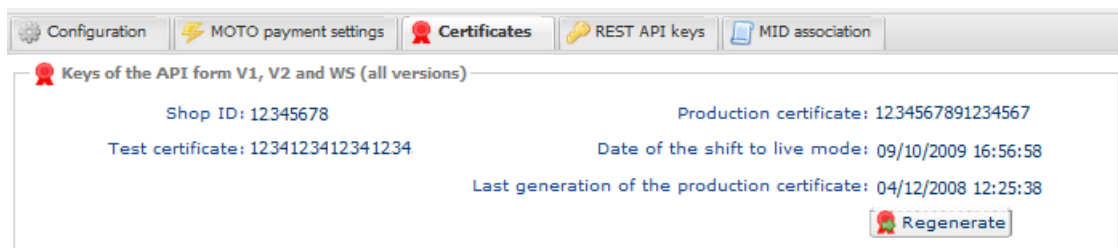
To sum up, you must define a range for enabling payment in installments.

5. PREREQUISITES

Before integrating the payment module, please make sure that you are in possession of the following elements:

- **Payment module file:** PayZen_OpenCart_3.x_v4.0.0.ocmod.zip
- **Your shop ID**
- **Test or production certificate**

The shop ID and the certificates are available in the PayZen Back Office (Menu: **Settings > Shop > Certificates**)



The screenshot shows the 'Certificates' tab in the PayZen Back Office. The page title is 'Keys of the API form V1, V2 and WS (all versions)'. It displays the following information:

Shop ID: 12345678	Production certificate: 1234567891234567
Test certificate: 1234123412341234	Date of the shift to live mode: 09/10/2009 16:56:58
	Last generation of the production certificate: 04/12/2008 12:25:38

A 'Regenerate' button is located at the bottom right of the information box.

Your PayZen Back Office is available at this address:

<https://secure.payzen.eu/vads-merchant/>

6. INSTALLATION AND CONFIGURATION OF THE MODULE

6.1. Update

To update the payment module, you must first uninstall and delete its previous version.

WARNING: Do not forget to save the parameters of your module before you uninstall it and make sure you save the production certificate that is no longer visible in the PayZen Back Office.

In the last version of the payment module, a new parameter has been added: **Signature algorithm**. By default, this field is set to **SHA-256** and its value must be the same as the selected algorithm in the PayZen Back Office (**Settings > Shop**). If they are different, you will have to change the configuration in the PayZen Back Office.

1. Go to the **Extensions > Extensions** section, then choose the **Payments** extension type.
2. Look for the installed version of the payment module and click on the **Uninstall** button (-).
3. Go to the **Extensions > Installer** section and delete the old version of the payment module.
4. Refer to the next chapter (First Installation) and install the payment module.

6.2. First installation

1. In the OpenCart Back Office, go to the **Extensions > Installer** menu and click on **Upload**.
2. Find and select the payment module and click on **Open**.
3. In case you encounter any problem during the installation from your Opencart admin, go to next step. Otherwise, go to step 6.
4. Copy the **admin**, **catalog** and **system** subfolders of the **upload** directory from the PayZen_OpenCart_3.x_v4.0.0.ocmod.zip file.
5. Paste it to the root of your installation.
6. From the **Extensions > Extensions** menu, select **Payments** in the extension type field, find the PayZen module and click on the Install (+) button.

6.3. Configuring the payment module

To configure the module, go to the **Extensions > Extensions** menu. Select **Payments** in the extension type field, look for the PayZen module and click on the **Modify** button.

The payment module configuration is divided into several parts:

- **General configuration:** Concerns the general configuration of the module.
- **One-time payment:** Allows to enable and configure single payments.
- **Orders :** Allows to configure order states and notifications.

General configuration

Access to the payment gateway	
Shop ID	Indicate the 8-digit shop ID provided in your Back Office (Menu: Settings > Shop > Certificates).
Test certificate	Indicate the test certificate provided in your Back Office (Menu: Settings > Shop > Certificates).
Production certificate	Indicate the production certificate provided in your Back Office (Menu: Settings > Shop > Certificates). Note that the production certificate will only become available after the test phase has been completed.
Mode	Allows to indicate the operating mode of the module (TEST or PRODUCTION) The PRODUCTION mode becomes available only after the test phase has been completed. The TEST mode is always available.
Signature algorithm	Algorithm used to compute the signature of the payment form. The algorithm must be the same as the selected algorithm in the PayZen Back Office (Settings > Shop). If they are different, you will have to change the configuration in the PayZen Back Office. WARNING: HMAC-SHA-256 algorithm must not be selected until it is not available in the PayZen Back Office.
Instant Payment Notification URL	Copy this URL into your Back Office (Menu Settings > Notification rules > Instant payment Notification URL at the end of payment): http://www.your-domain.com/index.php?route=extension/payment/payzen/callback
Payment page URL	This field is pre-populated by default: https://secure.payzen.eu/vads-payment/

Payment page	
Default languages	This option allows to choose the default language of the payment page in case the language of OpenCart is not supported by PayZen. If the language(s) used by the OpenCart is (are) implemented into PayZen, the payment page will be displayed in the language of OpenCart when the buyer clicks on "Pay".
Available languages	Allows to customize the language displayed on the payment page. Buyer will be able to select a language when he is redirected on the payment page. If you do not select any language, all the languages will be displayed on the payment page. To select a language, press and hold the " Ctrl " key and click on the desired languages. Available languages: German, English, Chinese, Spanish, French, Italian, Japanese, Dutch, Polish, Portuguese, Russian, Swedish, Turkish.
Capture delay	By default, this parameter is configured in your Back Office. (Menu: Settings > Shop > Configuration - section: Capture delay) It is recommended to not populate this parameter.
Validation mode	Back Office Configuration: Recommended value.

Payment page	
	<p>Allows to use the configuration defined in the Back Office. (Menu: Settings > Shop > Configuration – section: validation mode)</p> <p>Automatic: This value indicates that the payment will be captured in the bank automatically without any action on the merchant's part.</p> <p>Manual: This value indicates that transactions will have to be manually validated by the merchant in the Back Office.</p> <p>Warning: if the transaction has not been validated by the merchant before the expiration date, it will never be captured in the bank.</p>

Selective 3DS	
Disable 3D Secure	<p>Amount below 3DS will be disabled. Below this amount, 3DS rules from the risk assessment will not be applied. Leave empty to let the payment gateway decide if a 3DS authentication is required.</p> <p>WARNING: The value of this field will be taken into account only if the option "Selective 3D-Secure" is enabled for your PayZen shop. This option can only be enabled upon agreement of your bank. Some card types, such as MAESTRO, require a mandatory 3DS authentication. In this case, your configuration will not be taken into account.</p>

Return to shop	
Automatic redirection	<p>This option allows to automatically redirect the buyer to the merchant website. This option depends on the following settings. This option is disabled by default.</p>
Time before redirection (success)	<p>In case the automatic redirection option is enabled, you can define the delay in seconds before your buyer is redirected to your shop in case of a successful payment.</p>
Message before redirection (success)	<p>In case the automatic redirection option is enabled, you can define the message that will appear on the platform following a successful payment before your buyer is redirected to the shop. The default message is: "Redirection vers la boutique dans quelques instants" (Redirection to the shop in a moment)</p>
Time before redirection (failure)	<p>In case the automatic redirection option is enabled, you can define the delay in seconds before your buyer is redirected to your shop in case of a failed payment.</p>
Message before redirection (failure)	<p>In case the automatic redirection option is enabled, you can define the message that will appear on the gateway following a failed payment before your buyer is redirected to the shop. The default message is: "Redirection vers la boutique dans quelques instants" (Redirection to the shop in a moment)</p>
Return mode	<p>During the redirection to the shop, these parameters are returned to the shop in GET or POST modes. The GET mode is more convenient for the buyer as it allows to prevent the browser from displaying a pop-up window that indicates that the buyer is leaving an https environment for an http environment which obliges the buyer to click on "Accept" to return to the shop.</p>

Once you have completed the configuration, click on **Save**.

One-time payment

Setup of the payment module	
Activation	<p>In order to enable the single payment method, select Enabled. This mode est set to Enabled by default.</p>
Restrictions	
Payment area	<p>Define the payment area to which this payment method will apply.</p>

Restrictions	
	The None value means that the module applies to all areas.
Minimum amount	This field defines the minimum amount for which you wish to offer this payment method.
Maximum amount	This field defines the maximum amount beyond which you do not wish to offer this payment method.

Once you have completed the configuration, click on **Save**.

Commands

Order state	
Order state in case of success	Select from the list the order status in case of accepted payment.
Order state in case of failure	Choose from the list the order status in case of declined payment.
Order state in case of cancellation	Choose from the list the order status in case of cancellation by the buyer.
Notify the buyer in case of declined payment	Select Yes if you want to notify by e-mail the buyer in case of declined payment.
Notify the buyer in case of cancellation	Select Yes if you want to notify by e-mail the buyer in case of cancellation.

Once you have completed the configuration, click on **Save**.

6.4. Payment in installments

To configure the module, go to the **Extensions > Extensions** menu. Select **Payments** in the extension type field, look for the PayZen module and click on the **Install (+)** button.

Then, click on **Modify** to configure the module.

To configure the Installments Payment Method, do the same as the Single Payment Method configuration. Then proceed to the setting of the payment option in the Installments Payment tab.

The additional settings are :

Payment options	
First installment	Amount of the first installment, expressed as a percentage of the total amount. Example: For an amount of 100 euros paid in 3 installments, you can set the percentage of the first payment at 50% of the total amount. This means that the amount of the first installment will be 50euros and that the two others will be of 25euros. For 50% enter 50 . If you wish to set identical amounts for all installments, leave the field empty.
Number	Number of installments: 3 for payment in 3 installments 4 for payment in 4 installments Etc.
Delay	Delay (in days) between each installment.

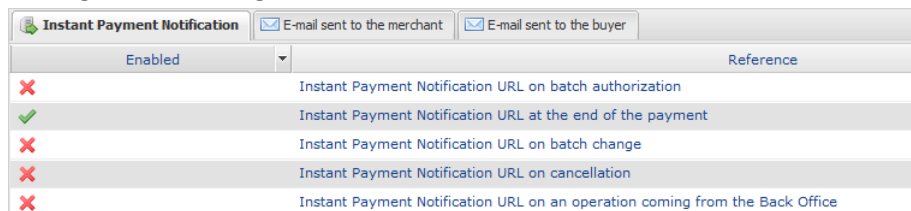
Once you have completed the configuration, click on **Save**.

7. SETTING UP THE INSTANT PAYMENT NOTIFICATION URL

Several notification types are provided in the Back Office. They allow to manage events (payment abandoned by the buyer, payment canceled by the merchant, payment validated by the merchant, etc.) that will trigger a call to the merchant website and to configure the URL of the contact page.

To access notification rule management:

1. Sign into: <https://secure.payzen.eu/vads-merchant/>.
2. Go to the following menu: **Settings > Notification rules.**



Instant Payment Notification	
<input checked="" type="checkbox"/> E-mail sent to the merchant <input checked="" type="checkbox"/> E-mail sent to the buyer	
Enabled	Reference
✘	Instant Payment Notification URL on batch authorization
✔	Instant Payment Notification URL at the end of the payment
✘	Instant Payment Notification URL on batch change
✘	Instant Payment Notification URL on cancellation
✘	Instant Payment Notification URL on an operation coming from the Back Office

Figure 1: Notification rules

Right click > Enable the rule if a red cross appears in the **Enabled** column of the following rules:

- Instant Payment Notification URL at the end of payment
- Instant Payment Notification URL on cancellation

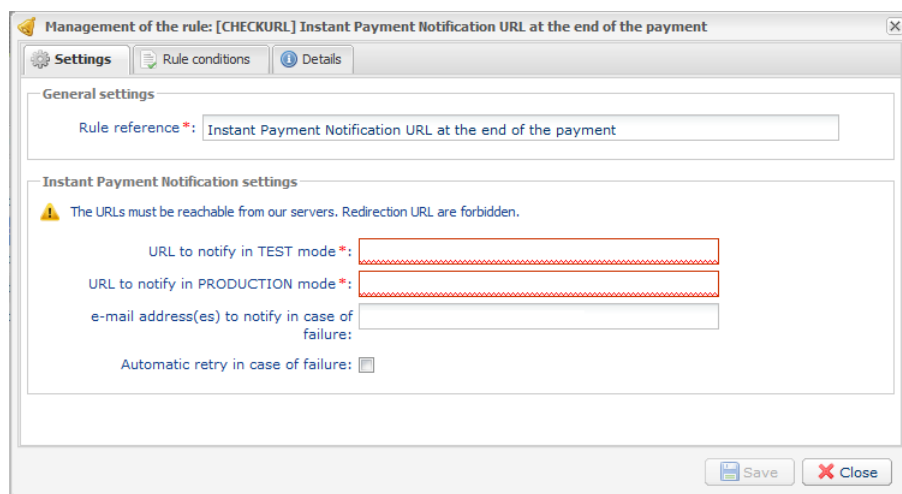
7.1. Setting up the Instant Payment Notification

In your PayZen Back Office, you must set up a URL that will be systematically called after a payment. It will inform the merchant website of the payment result even if your client has not clicked on return to the shop.

This parameter is called Instant Payment Notification at the end of payment.

To set up this notification:

1. Right-click on **Instant Payment Notification URL at the end of payment**.
2. Select **Enable the rule**.
3. Once again, right-click on **Instant Payment Notification URL at the end of payment**.
4. Select **Manage the rule**.
5. Enter the following URL in the fields **URL to call in TEST mode** and **URL to call in PRODUCTION mode**:
http://www.your-domain.com/index.php?route=extension/payment/payzen/callback



The screenshot shows a dialog box titled "Management of the rule: [CHECKURL] Instant Payment Notification URL at the end of the payment". It has three tabs: "Settings", "Rule conditions", and "Details". The "Settings" tab is active. Under "General settings", there is a field for "Rule reference *" containing the text "Instant Payment Notification URL at the end of the payment". Under "Instant Payment Notification settings", there is a warning icon and the text "The URLs must be reachable from our servers. Redirection URL are forbidden." Below this, there are four fields: "URL to notify in TEST mode *:", "URL to notify in PRODUCTION mode *:", "e-mail address(es) to notify in case of failure:", and "Automatic retry in case of failure:" with a checkbox. At the bottom right, there are "Save" and "Close" buttons.

6. Enter the **E-mail address(es) to notify in case of failure**.
7. To specify several e-mail addresses, separate them with a semi-colon.
8. Configure the **Automatic retry in case of failure**.

This option allows to automatically send notifications to the merchant website in case of failure, up to 4 times.

For more information, see chapter **Activating the automatic retry** of *Guide d'implémentation API Formulaire*.

9. Save the changes.

If the payment gateway is unable to access the URL of your page, an e-mail will be sent to the e-mail address specified.

It contains:

- the HTTP code of the encountered error
- parts of analysis depending on the error
- its consequences,
- instructions to resend from the PayZen Back Office the notification to the URL already specified.

7.2. Setting up notifications in case of abandoned or canceled payments

The payment gateway can systematically notify the merchant website:

- In case the buyer abandons/cancels the payment, using the **Cancel and return to shop** button.
- When the buyer has not completed the payment process before the payment session expired.

The maximum length of a payment session is 10 minutes.

To set up this notification:

1. Right-click **Instant Payment Notification URL on cancellation**.
2. Select **Manage the rule**.
3. Enter the following URL in the fields **URL to call in TEST mode** and **URL to call in PRODUCTION mode**: `http://www.your-domain.com/index.php?route=extension/payment/payzen/callback`

4. Enter the **E-mail address(es) to notify in case of failure**.

5. To specify several e-mail addresses, separate them with a semi-colon.

6. Configure the **Automatic retry in case of failure**.

This option allows to automatically send notifications to the merchant website in case of failure (up to 4 times).

7. Save the changes.

If the payment gateway is unable to access the URL of your page, an e-mail will be sent to the e-mail address specified.

It contains:

- the HTTP code of the encountered error
- parts of analysis depending on the error
- its consequences,
- instructions to resend from the PayZen Back Office the notification to the URL already specified.

7.3. Testing the Instant Payment Notification URL

In order to make sure that the Instant Payment Notification functions correctly, follow these steps:

1. Make sure that your URL is available online: your shop must neither be **in maintenance mode**.
2. Make sure that your notification URL is available without any redirection.
 - a. To do this, paste your notification URL to the address bar of your browser and launch the search.
 - b. Make sure your URL did not change.

If your URL has changed, for example from "*http*" to "*https*" or "*http://abc.net*" to "*http://www.abc.net*", it means a redirection is active on your website. Then, copy the URL from the address bar and modify the URL filled in the configuration of all notification rules.
3. Make sure that the "Automatic redirection" option is disabled in the payment module settings.
4. Check that the **Instant Payment Notification URL at the end of payment** is populated in the PayZen Back Office (see above).
5. Make an order on your website and proceed to payment.
6. **Do not click on** "Return to shop" at the end of payment and close the current tab of your browser.
7. Make sure that the order has been created in the OpenCart Back Office.

If the order has not been created in the OpenCart Back Office, this means that the call has failed.

8. CUSTOMIZING THE NAME OF THE PAYMENT METHOD

By default, during checkout, the PayZen payment module will display : **Pay by card**.

The label can be edited, for example : *Pay by credit card with PayZen*

To edit the label, open the Payzen.php file in the following folder : Catalog\language\fr-fr\extension\payment

Then replace **Payment by card** with the label of your choice :

```
$_['text_payment_Payzen_title'] = 'Pay by bank card with PayZen';
```

```
$_['text_payment_Payzen_multi_title'] = 'Pay by bank card in %s installments with PayZen';
```

9. PROCEEDING TO TEST PHASE

Now that the payment module has been configured and you have specified the IPN URLs, you can move on to test phase in order to generate the production key.

The list of the tests to perform is provided in the PayZen Back Office, via the menu **Settings > Shop > Certificates**.

Tests control

Here is a summary of the tests performed up to now.
You must perform a valid payment for each row in the table below.
* manual payments are not taken into account ;
* test payments are deleted after 30 days ;
* the vada_page_action parameter must be set to PAYMENT.

CB	Mastercard	Maestro	Visa Electron	Payment date	Test status
4970100000000014	5970100300000018	5000550000000029	4917480000000008		✘
4970100000000055	5970100300000067	5000550000000052	4917480000000057		✘
4970100000000063	5970100300000075	5000550000000060	4917480000000065		✘
4970100000000071	5970100300000083	5000550000000078	4917480000000073		✘

Refresh the table

The "Generate the production certificate" button below will become operational once you have successfully completed all the required tests.
Click on the Refresh the table button to update the test progress.

Generate the production certificate

Each row of the list contains card numbers associated with the same scenario (i.e. 2 accepted payments and 2 refused payments).

Each column corresponds to a different card type: CB/VISA, MASTERCARD, MAESTRO, VISA ELECTRON.

To perform the test phase:

1. Make an order on your merchant website as if you were one of your buyers.
2. Select the payment method "**Payment by credit card**".
3. Once redirected to the payment page, select the card type of your choice.
4. Refer to the list of tests to identify the card number to use.
5. Once a test has been validated, its status is updated in the list. Click on **Refresh the table** button if the status has not been updated automatically.
6. Once the 4 tests have been validated, the **Generate the production certificate** button becomes available.

Tests control

Here is a summary of the tests performed up to now.
You must perform a valid payment for each row in the table below.
* manual payments are not taken into account ;
* test payments are deleted after 30 days ;
* the vada_page_action parameter must be set to PAYMENT.

CB	Mastercard	Maestro	Visa Electron	Payment date	Test status
4970100000000014	5970100300000018	5000550000000029	4917480000000008	02/08/2017 11:45:03	✔
4970100000000055	5970100300000067	5000550000000052	4917480000000057	02/08/2017 11:53:32	✔
4970100000000063	5970100300000075	5000550000000060	4917480000000065	02/08/2017 11:53:47	✔
4970100000000071	5970100300000083	5000550000000078	4917480000000073	02/08/2017 11:54:22	✔

Refresh the table

All the required tests have been successfully completed. You can now generate the production certificate by clicking on the below button.

Generate the production certificate

7. Click the **Generate the production certificate** button and accept the notification messages that will appear.

The production key is now available.

10. SHIFTING THE SHOP TO PRODUCTION MODE

After you receive a confirmation e-mail informing you that a certificate has been generated, you can configure the payment method by following the steps below:

- Retrieve the production certificate provided in the Back Office (**Settings > Shop > Certificates**).
- In the module configuration parameters:
 - Populate the **Production certificate** field.
 - Switch from TEST to PRODUCTION mode.
 - Save the changes.
- Make sure that you have specified the Instant Payment Notification URL in production mode as described in the chapter **Setting up the Instant Payment Notification URL**.

Once the production settings have been configured, we recommend to make a first real payment.

You will be able to cancel this payment in the Back Office. This transaction will not be captured in the bank.

Note on the production certificate:

For security reasons, this certificate will no longer be visible after the first transaction in production mode has been made from your shop.

Note on the TEST mode:

When your shop is in production mode, the TEST mode remains available.

To work in test mode, follow the steps below:

- Switch from PRODUCTION to TEST mode.
- Make sure that the **Test certificate** is correctly specified.
- Save the changes.

11. DOCUMENTATION UPDATE

As we constantly strive to improve the understanding and proper use of this product documentation, we welcome constructive remarks from our users.

Please send us your comments and suggestions to the following address: support@payzen.eu Do not forget to specify the version of OpenCart and of the payment module you use.