Systempay
Solutions d'avance

**Payment module integration for
Modified eShop Shopsoftware**

Contents

1. RELEASE NOTES

Version	Date	Comments
1.2.0	5/12/2021	<u>New features</u> • Addition of the "Signature algorithm" parameter for the HMAC-SHA-256. • Update of the message concerning the transition to production mode on the return page. • Compatibility with versions PHP 5.3 and higher. • The verification of the key format has been removed in order to accept alphanumeric keys. • Buyer's brand selection is displayed in order details. • Specific message if the IPN has not worked and the shop is in maintenance mode. • Addition of Spanish translations. • The **vads_order_info** variables have been replaced with **vads_ext_info**.
1.1.0	6/1/2016	<u>New features</u> • Renaming of module files and folders. • Compatibility with versions 2.x. • Creation of a table in the database to record payment details. • Addition of English and French translation files. • Update of German translations.
1.0	9/14/2011	Initial version.

2. MODULE FEATURES

The payment module offers the following functionalities:

- Immediate payment

- Compatibility with modified_eCommerce_Shopsoftware version 1.x-2.x

- Multi-language compatibility

- Multi-currency compatibility

- Custom 3D Secure depending on the order amount

- Automatic redirection to the shop once the payment is made

- Definition of a minimum/maximum amount for each payment type

- Management of the order status for accepted payments

- Systematic registration of orders at the end of payment via a silent URL (Instant Payment Notification URL)
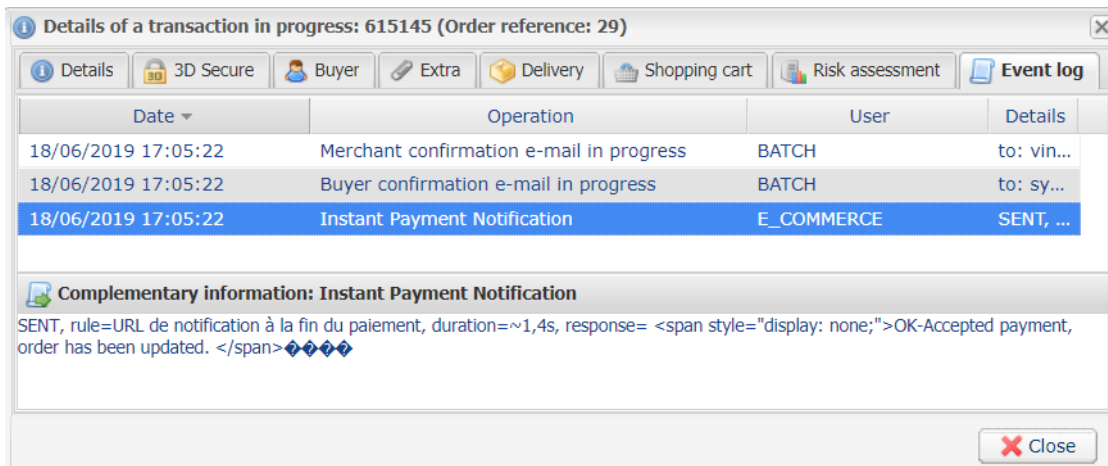
3. READ CAREFULLY BEFORE GOING ANY FURTHER

The most frequent error concerns the Instant Payment Notification URL. The Instant Payment Notification URL is the only way the Systempay 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.

Frequent errors:

• **Your modified_eCommerce_Shopsoftware shop is in maintenance mode**

• **Your Instant Payment Notification URL is protected by an .htaccess file**

• **You have blocked the IP addresses of the payment gateway**

• **You have not encoded the notification URL in the Merchant Back Office**

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

Via the Merchant Back Office, display the payment details (double click), then go to the "**Event log**" tab.

4. PREREQUISITES

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

- **Payment module file**: Systempay_modified_eCommerce_Shopsoftware_1.x-2.x_v1.2.x.zip

- **Your shop ID**

- **Test or production key**

The Shop ID and the keys are available in the Merchant Back Office (menu: **Settings** > **Shop** > **Keys**)
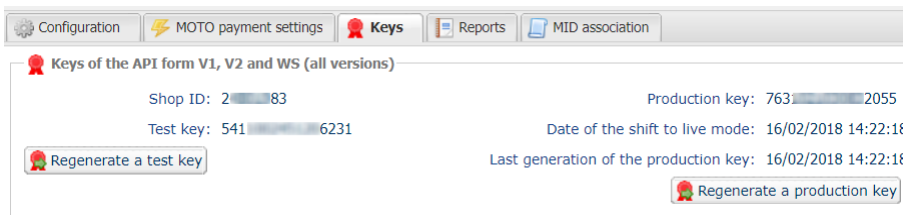
Reminder, your Merchant Back Office is available at this address:

https://paiement.systempay.fr/vads-merchant/

WARNING: All our payment modules are tested from a minimal PHP version, this version is visible from our documentary site:

If you have an older version, we invite you to contact the technical manager in charge of your site so that he updates the PHP version of the server. Thus, our support service will be able to assist you if you encounter a problem with our module.

Please note that the 7.0 version is no longer supported by PHP: *http://php.net/supported-versions.php*

5. PAYMENT MODULE INSTALLATION

5.1. Updating the module

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

WARNING: Make sure you save the parameters of your module before you uninstall it and save the production key that is no longer visible in the Systempay Back Office.

This module version offers this configuration: **Signature algorithm**, which was not present in some previous versions of our modules. By default, this field is set to **HMAC-SHA-256** and its value must be the same as in the Systempay Back Office (**Settings** > **Shop** > **Keys** tab). If the algorithm is different, the parameter must be changed via the Systempay Back Office.

The payment module is uninstalled via the back office: **Modules** > **Payment Methods** of the Systempay solution.

1. Click **Systempay**
2. Click **Uninstall**.

5.2. Installing the module

To install the payment module:

1. Copy the **lang, includes, images, callback** and **admin** folders, as well as the **chekout_process.php** file, located in the **Systempay_modified_eCommerce_Shopsoftware_1.x-2.x_1.2.x.zip** file.
2. Paste them at the root of your website.
3. From the Modified Back Office, click on the following menu**: Modules > Payment methods**.
4. In the list of non-installed modules, click on **Systempay**.
5. Click **Install**.

5.3. Configuring the payment module

1. From the Modified Back Office, click on the following menu**: Modules > Payment methods**.

2. Click on the list of modules installed on **Systempay**.

3. In the right section, click **Edit**.

Module settings	
Instant Payment Notification URL	URL to copy in your Merchant Back Office (**Settings** > **Notification rules** > **Instant Payment Notification URL at the end of the payment** > **Instant Payment Notification URL of the API form V1, V2** menu). For more information, see the chapter and the sub-chapters on **Configuring the notification URL**.
Activation	In order to enable the payment method, select **Yes**. This mode is set to **Enabled** by default.
Payment area	Define the payment area to which this payment method will apply. The **None** value means that the module applies to all areas.
Shop ID	Indicate the 8-digit shop ID, available in your Merchant Back Office (Menu: **Settings** > **Shop** > **Keys**).
Test key	Specify the test key available via your Merchant Back Office (Menu: **Settings** > **Shop** > **Keys**).
Production key	Specify the production key available in your Merchant Back Office (Menu: **Settings** > **Shop** > **Keys**). Note that the production key 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 one configured in the Merchant Back Office (**Settings** > **Shop** > **Keys**). If the algorithm is different, the parameter will have to be modified via the Merchant Back Office.
Payment page URL	This field is pre-populated by default: *https://paiement.systempay.fr/vads-payment/*
Default language	This option allows to choose the default language of the payment page in case the language of modified_eCommerce_Shopsoftware is not supported by Systempay. If the language(s) used by the modified_eCommerce_Shopsoftware is (are) implemented into Systempay, the payment page will be displayed in the language of modified_eCommerce_Shopsoftware when the buyer clicks on "Pay".
Available languages	Allows to customize the language displayed on the payment page. The buyer will be able to select a language when he or she is redirected to the payment page. If you do not select any language, all 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	Indicates the delay (in days) before the capture. By default, this parameter can be configured in your Merchant Back Office (menu: **Settings** > **Shop** > **Configuration** - section: Capture delay). It is recommended to not populate this parameter.
Validation mode	***Back Office configuration:*** Recommended value. Allows to use the configuration defined in the Merchant Back Office (menu: Settings > Shop > Configuration section: validation mode). ***Automatic:***

Module settings	
	This value indicates that the payment will be captured in the bank automatically without any action on the merchant's part.
	Manual:
	This value indicates that the transactions will require manual validation by the merchant via the Merchant Back Office.
	<u>Warning</u>: if the transaction is not validated by the merchant before the expiration date of the authorization request, it will never be captured in the bank.
Card types	This field allows to select the cards logo to be displayed on the payment page.
	Warning:
	The payment types offered to the buyer on the payment page depend on the contracts and options associated with your Systempay offer.
	It is recommended to leave this parameter empty.
Managing 3DS	• **In 3DS1: Disables** the 3DS1 process during an e-commerce payment. Requires the **Selective 3DS1** option.
	IMPORTANT
	This feature will become obsolete as soon as the 3DS1 version is no longer supported by the networks.
	As of October 2020, issuers can refuse the transaction if 3D Secure authentication has not been performed.
	This behavior is called "Soft Decline".
	To reduce the number of rejected payments, the payment gateway automatically makes a new payment attempt with 3D Secure authentication, when possible.
	• **In 3DS2:** Allows to request authentication without interaction (frictionless). Requires the **Frictionless** 3DS2 option.
	• For payments made in euro, if the amount is lower than €30, a request for frictionless is transmitted to the DS. **If the request for frictionless is accepted by the issuer, the merchant loses the payment guarantee.**
	• For payments made in euros, if the amount is greater than €30, the value transmitted by the merchant is ignored and the management of cardholder authentication is delegated to the gateway.
	• For payments made in a currency other than euro, a request for frictionless is transmitted to the DS.
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 for which you do not wish to offer this payment method.
Automatic redirection	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.
Time before redirection (success)	If 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.
Message before redirection (success)	If the **automatic redirection** option is enabled, you can define the message that will appear on the screen following a successful payment before your buyer is redirected to the shop.
	The default message is:
	"Redirection to the shop in a moment".
Time before redirection (failure)	If 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.
Message before redirection (failure)	If the **automatic redirection** option is enabled, you can define the message that will appear on the screen following a failed payment before your buyer is redirected to the shop.
	The default message is:
	"Redirection to the shop in a moment".
Return mode	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

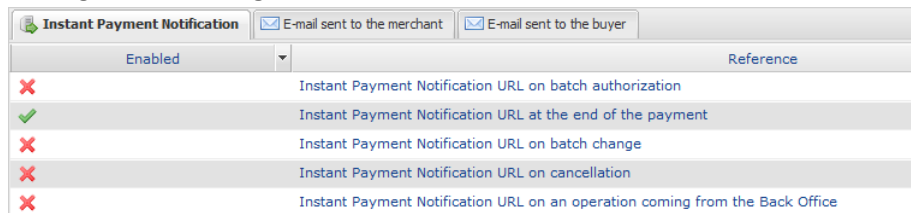| Module settings	
	environment for an http environment which obliges the buyer to click on "Accept" to return to the shop.
Order status (payment accepted)	Select the Registered orders status. It is recommended to leave the **default** value.

Click **Update** to confirm the module configuration.

6. SETTING UP THE INSTANT PAYMENT NOTIFICATION URL

The Merchant Back Office provides several types of notifications. They allow to manage the events that will generate a call to the merchant website and to configure the URL of the contact page.

To access notification rule management:

1. Sign in to: *https://paiement.systempay.fr/vads-merchant/*.

2. Go to the following menu: **Settings** > **Notification rules**.

🔧 **Instant Payment Notification**	✉ E-mail sent to the merchant	✉ 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 the payment

6.1. Setting up the Instant Payment Notification

This notification is required to communicate the result of a payment request.

In your Merchant 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 URL at the end of the payment.

To set up this notification:

1. Right-click **Instant Payment Notification URL at the end of the payment**.

2. Select **Enable the rule**.

3. Right-click **Instant Payment Notification URL at the end of the payment** once again.

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** (**Notification URL of the Hosted payment page V1, V2** section): The URL to copy is present in the module configuration (**Notification URL**).

   The URL must resemble the one below:

   http://www.your-domain.com/callback/systempay/process.php

   Replace **your-domain.com** with the domain name of your website.

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. Set up the parameters for **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).

   A notification will be considered as failed if the HTTP code returned by the merchant server is not on the following list: **200**, **201**, **202**, **203**, **204**, **205**, **206**, **301**, **302**, **303**, **307**, **308**.

   Automatic retry does not apply to notifications manually triggered via the Merchant Back Office.

   Call attempts are scheduled at fixed intervals every 15 minutes (00, 15, 30, 45). After each failed attempt, a notification e-mail is sent to the e-mail address specified earlier.

9. Save the changes.

6.2. 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** nor be protected by an .htaccess file.

2. Make sure that your notification URL is available <u>without any redirection</u>.

    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 Merchant 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. In the **Customers** > **Orders** menu, make sure that the status of the order is **Pending**.

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

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

It contains:

*   The HTTP code of the encountered error
*   Parts of error analysis
*   Its consequences
*   Instructions to resend the notification to the URL already specified above from the Merchant Back Office

7. PROCEEDING TO TEST PHASE

Once 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.

Different cases of payments can be simulated by using test card numbers specified on the payment page. The Merchant will be able to test all 3D Secure authentication results (if the Merchant is enrolled and 3DS is not disabled).

The list of the tests to perform for generating the production key is provided in the Merchant Back Office, **Settings** > **Shop** > **Keys** menu.

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 `vads_page_action` parameter must be set to `PAYMENT` or `REGISTER_PAY`.

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 key" 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 production key

If your store does not have the test control table, it is not necessary to perform tests before going into production. You can directly click the **Generate production key** button to go into production. However, we recommend to make some payment tests to make sure that the payment solution is correctly integrated.

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 on the list. Click the **Refresh the table** button if the status has not been updated automatically.

6. Once the 4 tests have been validated, the **Generate production key** 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 `vads_page_action` parameter must be set to `PAYMENT` or `REGISTER_PAY`.

CB	Mastercard	Maestro	Visa Electron	Payment date	Test status
4970100000000014	5970100300000018	5000550000000029	4917480000000008	03/01/2019 10:53:24	✔
4970100000000055	5970100300000067	5000550000000052	4917480000000057	03/01/2019 10:55:29	✔
4970100000000063	5970100300000075	5000550000000060	4917480000000065	03/01/2019 10:56:32	✔
4970100000000071	5970100300000083	5000550000000078	4917480000000073	03/01/2019 10:57:39	✔

🔄 Refresh the table

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

📄 Generate the production key

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

The production key is now available.

8. SHIFTING THE SHOP TO PRODUCTION MODE

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

• Retrieve the production key available in the Merchant Back Office (**Settings** > **Shop** > **Keys**).

• In the module configuration parameters:

   • Populate the **Production key** 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 parameters have been configured for your store, we recommend to make a real payment to make sure that your banking contract is functional.

You will then be able to cancel the payment via the Merchant Back Office.

Note on the production key:

For security reasons, this key will no longer be visible as soon as the first transaction in production mode is made in your shop.

Note on the TEST mode:

Once you 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 key** is correct.

• Save the changes.

9. OBTAINING HELP

Looking for help? Check our FAQ on our website

https://paiement.systempay.fr/doc/en-EN/faq/sitemap.html

For any technical inquiries or if you need any help, contact *technical support*.

To help us process your requests, please specify your Shop ID in your query (an 8-digit number).

This information is available in the "registration of your shop" e-mail or in the Merchant Back Office (**Settings** > **Shop** > **Configuration**).