# Ingenico ePayments (Connect platform) for Magento® 2

This extension allows processing payments in Magento® 2 via the Ingenico ePayments Connect platform.

The document covers the **installation, configuration, and usage** of the extension.

# End user documentation


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# 1 Requirements

The following requirements must be met for the smooth operation of the module:

## 1.1 Magento® 2

The following Magento® 2 versions are supported:

- Community Edition 2.1.7+, 2.2.6+, 2.3.0+
- Enterprise Edition 2.1.7+, 2.2.6+, 2.3.0+

## 1.2 PHP

These PHP versions are supported:

- PHP 7.2
- PHP 7.1
- PHP 7.0
- PHP 5.6

## 1.3 Ingenico contract

To use this extension, you need an Ingenico ePayments account (contract).

Please visit https://www.ingenico.com/epayments for more information or contact the Ingenico team.

# 2 Hints for using the module

## 2.1 Language support

The module supports the locale `en_US`. Translations are stored in CSV translation files and can therefore be modified by third-party modules.

## 2.2 Difference between Cancel and Void operations

On the order detail page, you will often have the ability to either "Cancel" or "Void" an order:

- To **cancel** an order means to cancel every transaction related to the order. This makes it impossible to create any further transactions (invoices, creditmemos, etc.).
- The **void** action only cancels the invoice of the order (i.e. a capture transaction). This leaves the order itself intact for further capture operations.

## 2.3 Compatibility with OneStepCheckout Magento® 2 Extension

The module is compatible with the OneStepCheckout Magento® 2 extension (onestepcheckout.com) in version 1.2.022. Newer versions may work as well, but are not officially supported.

Before you use the module with OneStepCheckout, please make sure to check the OneStepCheckout configuration. In the section **Billing address fields and settings**, the field *country_id* must be set to *Enabled* and *Required*.

### Compatibility

We can only guarantee compatibility with the OneStepCheckout Magento® 2 extension version 1.2.022. However, feel free to report any issues with newer versions to our Technical support.

# 3 Installation and configuration

## 3.1 Before installation

We strongly recommend making a complete backup of the shop's files and database before any module installation or update.

Also, the installation and module functionality should be completely verified on a testing or staging system before moving it into a production system.

## 3.2 Installation options

### 3.2.1 Installation from package using Composer

If you got the module as a `.zip` or `.tgz` package, and the package **contains a 'composer.json' file**, it is a so-called *Artifact* which can be installed with Composer.

Follow these steps:

- Copy (do not unzip) the package into a folder that is accessible by Composer.
- On the command line, navigate into the root folder of your Magento® 2 installation.
- Execute the following commands:

```
composer config repositories.epayments artifact /path/to/folder/with/zip
composer require nrepayments/module-epayments-m2
composer update
```

- Make sure that no Composer errors occurred. If there are any, they must be resolved.
- **Important:** the path in the above command is absolute, i.e. starting at the server (Linux) root.
- Then log out from the Magento® 2 admin panel, and log in again.
- After this, clear all Magento® 2 caches.
- Now proceed with the Module configuration.

### 3.2.2 Installation from Marketplace using Composer

You can get the module from the Magento® Marketplace and install it with Composer. The module files will be downloaded from the public repository during the installation.

- Please follow these instructions to install the module:

https://devdocs.magento.com/guides/v2.2/comp-mgr/install-extensions.html

- Then proceed with the Module configuration.

## 3.3 Module configuration

The extension adds a new configuration sections which must be configured to process payments with Ingenico ePayments:

```
Stores → Configuration → Sales → Ingenico ePayments
```

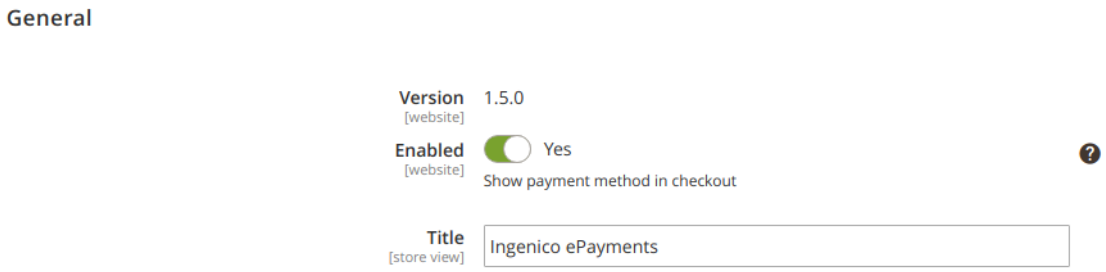
### Please note

Make sure that all fields in *Account Settings* and *Fraud Notification* are configured before saving the configuration.

Flush the Magento® 2 caches after making changes to the configuration.

### 3.3.1 General Settings

In the configuration section *General Settings*, you can configure the name of the Ingenico payment method that will be displayed to customers during checkout (see also Order placement).

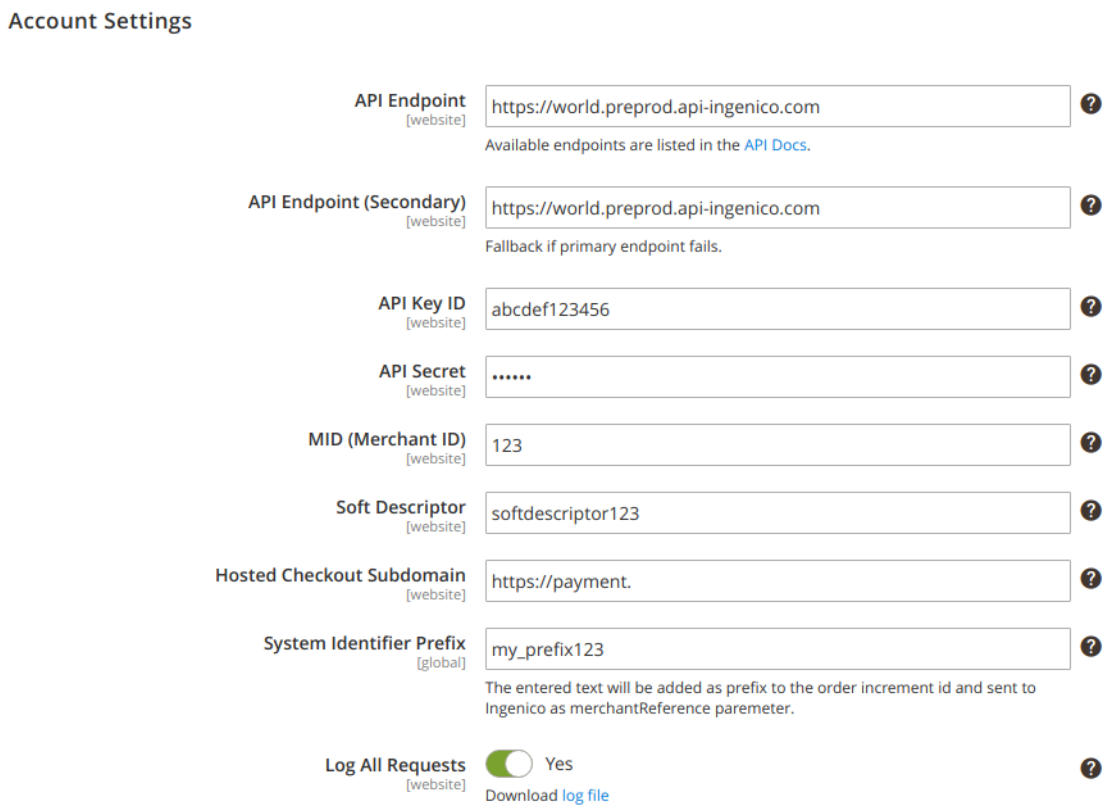



Set *Enabled* to *Yes* to display Ingenico ePayments in the checkout.

If you set it to *No*, the payment method is hidden from the checkout, but the module will still be active.

### 3.3.2 Account Settings

The section *Account Settings* configures the API endpoints, your access data, Merchant ID, Soft Descriptor, and Hosted Checkout subdomain. You will receive this information from the Ingenico team.




The secondary API endpoint is used as fallback if authentication with the primary endpoint fails. This allows to safely migrate endpoints.

The value for Hosted Checkout Subdomain should usually remain as it is, ending with a period.

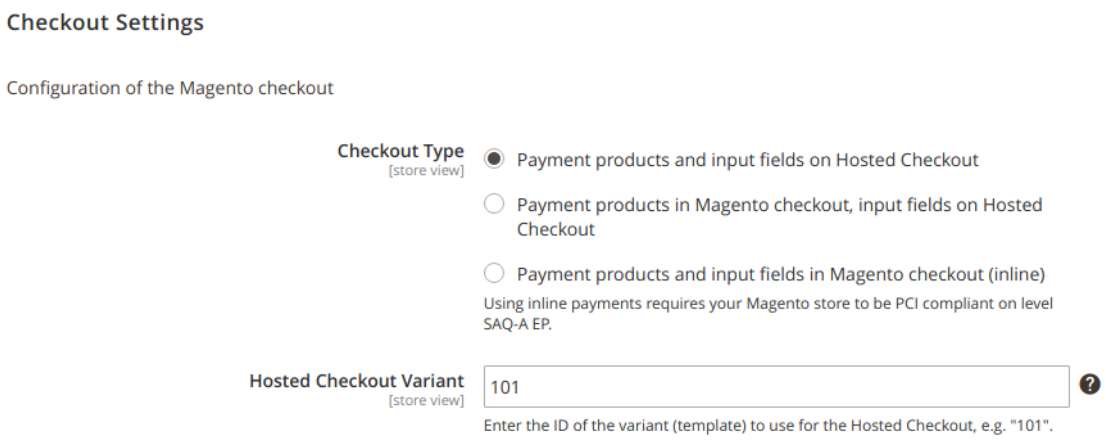
The System Identifier Prefix can be used to distinguish between several shop system instances. It applies system-wide to the entire Magento® 2 shop, not just to an individual Store or StoreView. The extension transmits Magento's order increment id as *merchantReference* to the platform. If a prefix is configured here, it is added before the order increment id and the whole string is sent to the platform.

Logging can also be enabled here, if needed.

> **Please note**
>
> If you enable *Log All Requests*, you should clear or rotate the log files regularly.

### 3.3.3 Checkout Settings

The section *Checkout Settings* lets you configure how the payment products are displayed and where the payment data is going to be entered by the customer.




- *Payment products and input fields on Hosted Checkout:* Display available payment products with input fields on the Hosted Checkout page (external payment site) after placing the order.
- *Payment products in Magento® checkout, input fields on Hosted Checkout:* Display payment products (except input fields) directly in the Magento® 2 checkout. The customer enters the payment data afterwards on the Hosted Checkout page after placing the order.
- *Payment products and input fields in Magento® checkout (inline)*: Display payment products with input fields directly in the Magento® 2 checkout (no redirection to external payment page, except for 3D Secure etc.).

The Hosted Checkout Variant is the numeric ID of the variant (template) to be used for the Hosted Checkout, e.g. "101". If none is configured, the default template that is set on the Connect account configuration will be used automatically.

#### 3.3.3.1 Technical background

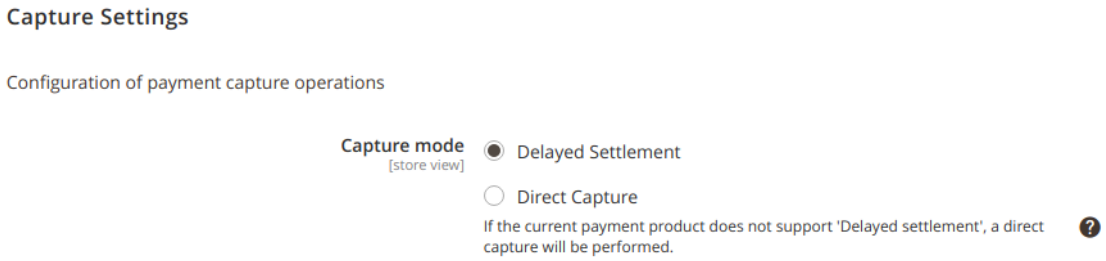
If you enable inline payments, the payment data (e.g. credit card information) is entered directly in your checkout and encrypted via the Connect JavaScript SDK. The encrypted data is then sent to your shop and forwarded to the Connect platform through the Connect Server SDK. Not all payment methods support payment data capture through this way - for those who don't the Hosted Checkout page will be used.

#### 3.3.3.2 PCI compliance

When using inline payments you will need to fill PCI SAQ A-EP, otherwise you should use PCI SAQ A.

### 3.3.4 Capture Settings

The section *Capture Settings* is used to configure what to do when a new payment is created.




- *Direct Capture:* Payments will automatically be captured and are reported as "paid" as soon as the capture is complete on the gateway. The invoice is created automatically within Magento.
- *Delayed Settlement:* You will have to manually capture new payments by creating an invoice from the order details page.

#### Delayed settlements

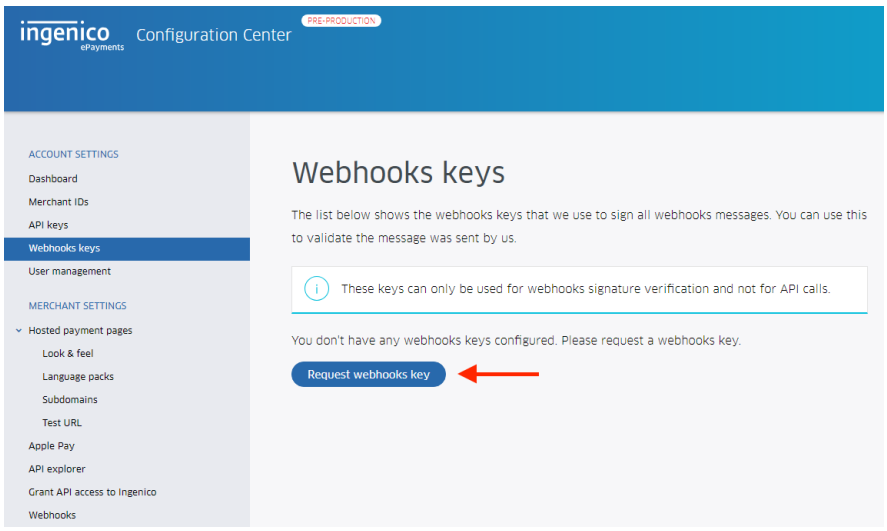
For more information about delayed settlements, please refer to the Ingenico ePayments API Documentation, section 'What is delayed settlement?'.

### 3.3.5 Webhooks

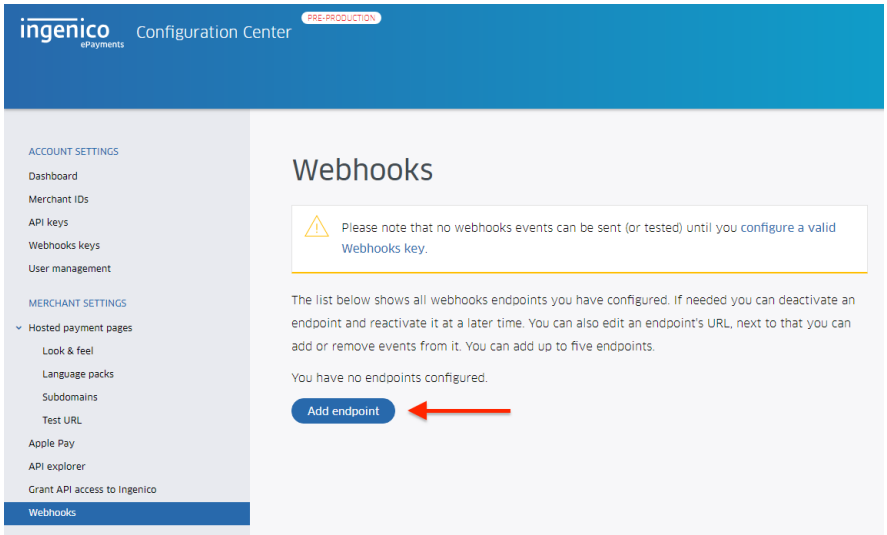
Webhooks allow automated updates of payment statuses in Magento® 2, which can trigger additional processes, if configured.

#### 3.3.5.1 Configuration at Ingenico

Please login to the Ingenico Configuration Center, then click *Webhooks keys* in the left menu in the section *Account settings*. Then click the button *Request webhooks key*.



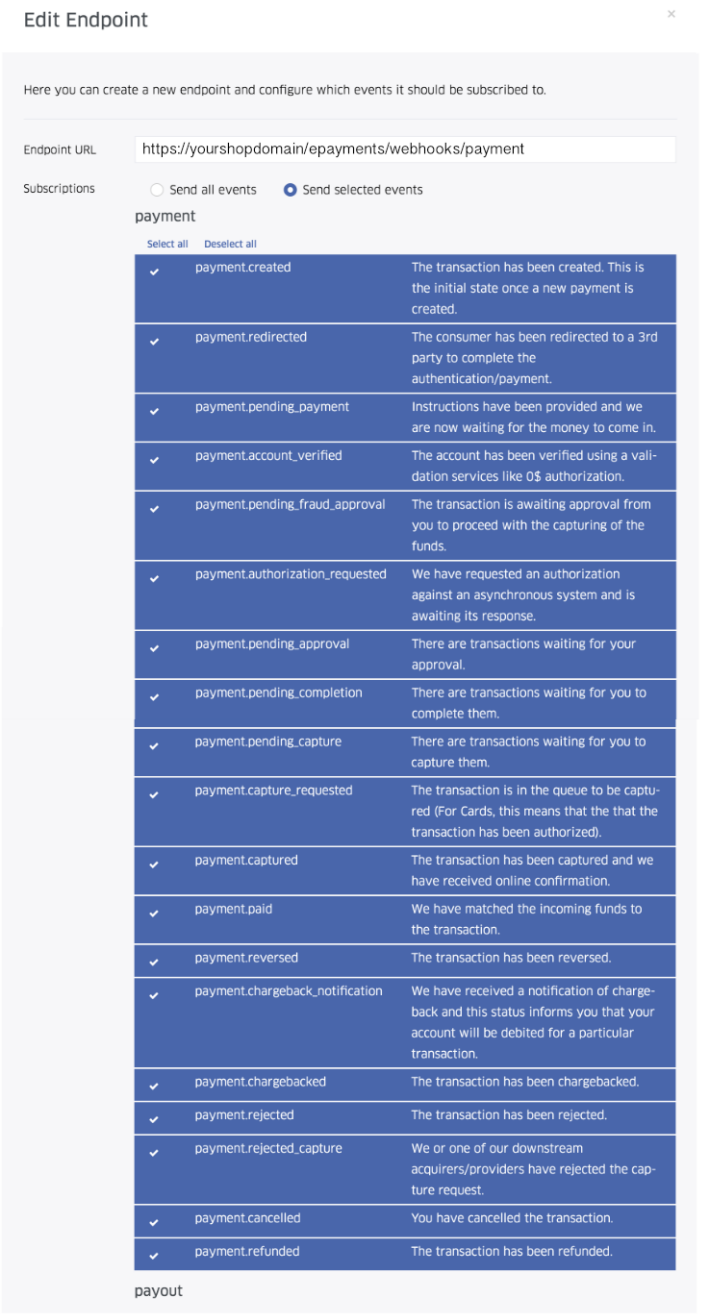

To configure the endpoint, click on *Webhooks* in the left menu in the section *Merchant settings*. Then click the button *Add endpoint*:



You need to **add two endpoints**: one for payment and one for refund.

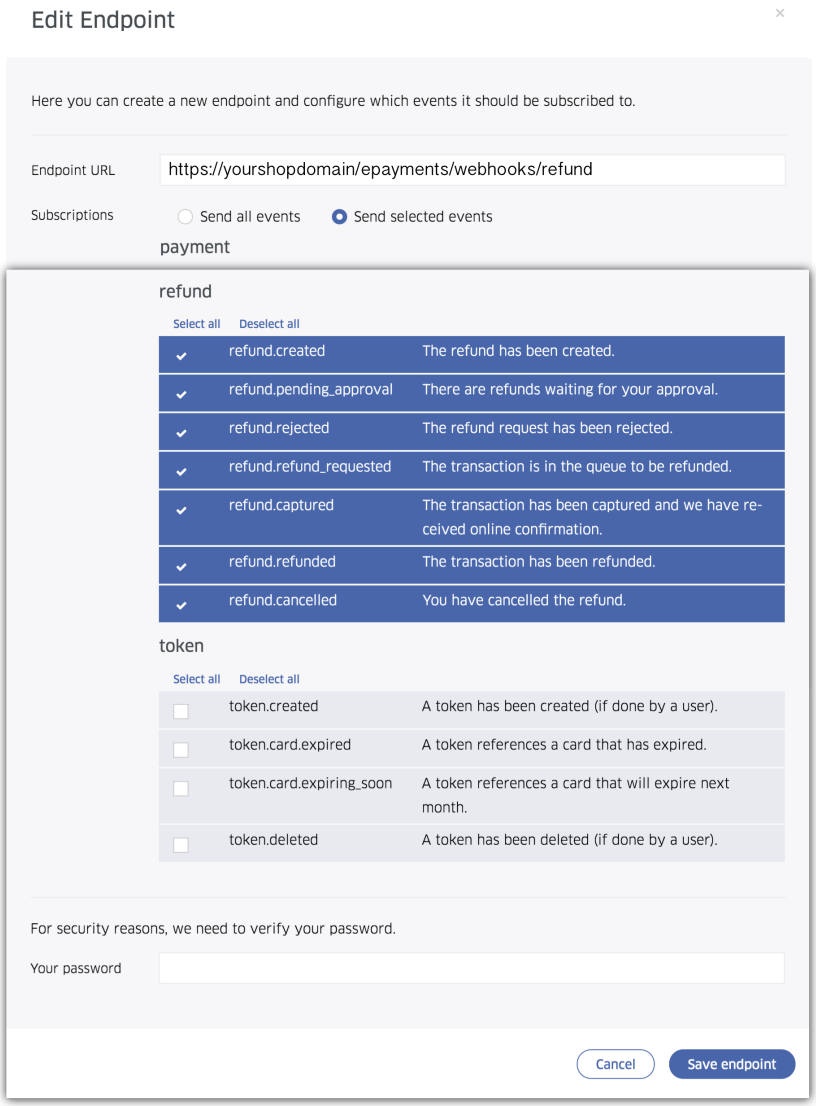
### 3.3.5.2 Endpoint for payment

When you create the endpoint for *payment*, enter https://yourshopdomain/epayments/webhooks/payment (replace *yourshopdomain* with the real shop URL) as the Endpoint URL and subscribe to the payment events.



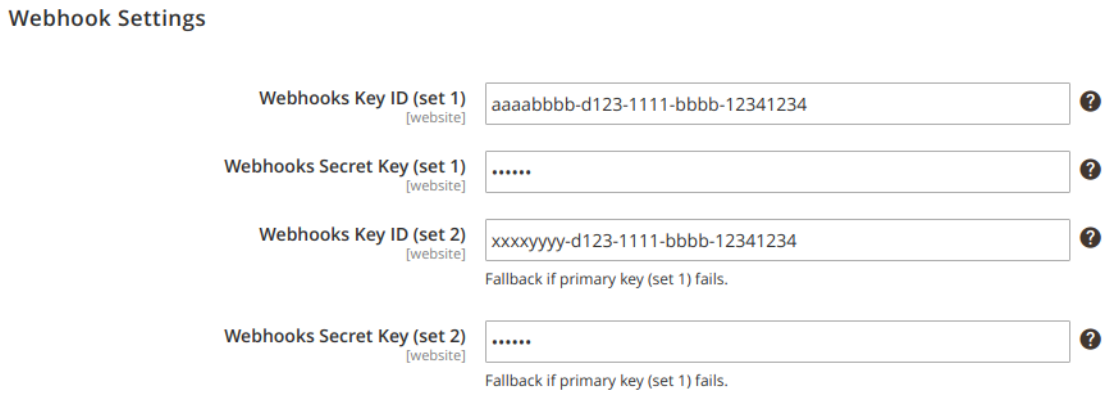
#### 3.3.5.3 Endpoint for refund

Create another endpoint for *refund*, entering https://yourshopdomain/epayments/webhooks/refund (again, replace *yourshopdomain* with the real shop URL) as the Endpoint URL and subscribe to the refund events.



#### 3.3.5.4 Configuration in Magento® 2

In the Magento® 2 extension, go to the section *Webhook settings* and enter the *Webhooks Key ID* and *Secret Key* (primary and secondary) in the Webhook Settings section:

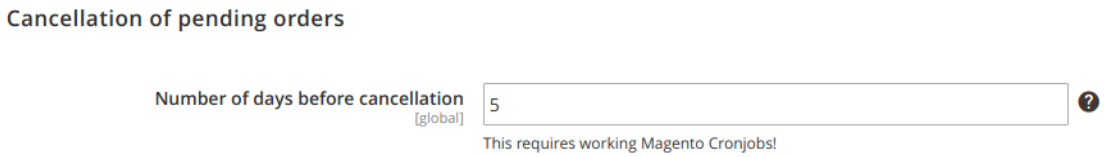



The *secondary* credentials are used if authentication with the *primary* credentials fails. You can use this to safely migrate keys without missing any Webhooks requests.

The secondary credentials are not optional. **Do not leave these fields empty.**

### 3.3.6 Cancellation of Pending Orders

In the section *Cancellation of Pending Orders*, you can configure the extension to automatically cancel abandoned orders after a period of days.




#### Please note

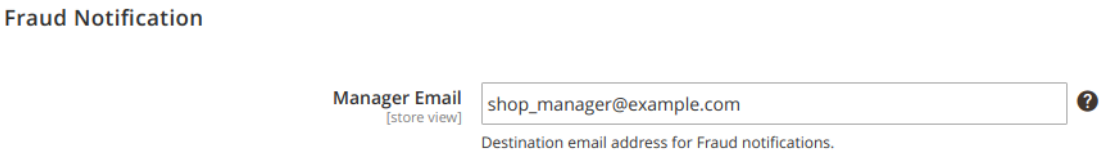
Automatic cancellations are performed by a periodically running *Cronjob*.

For this, the standard Magento® 2 Cronjobs must be configured correctly on your system. See also section Order update.

Please note that questions about the basic setup of Cronjobs in Magento® 2 are not covered by our technical support.

### 3.3.7 Fraud notification

In the section *Fraud notification* you can configure a destination email address for notifications when the Ingenico ePayments Fraud Detection is triggered.

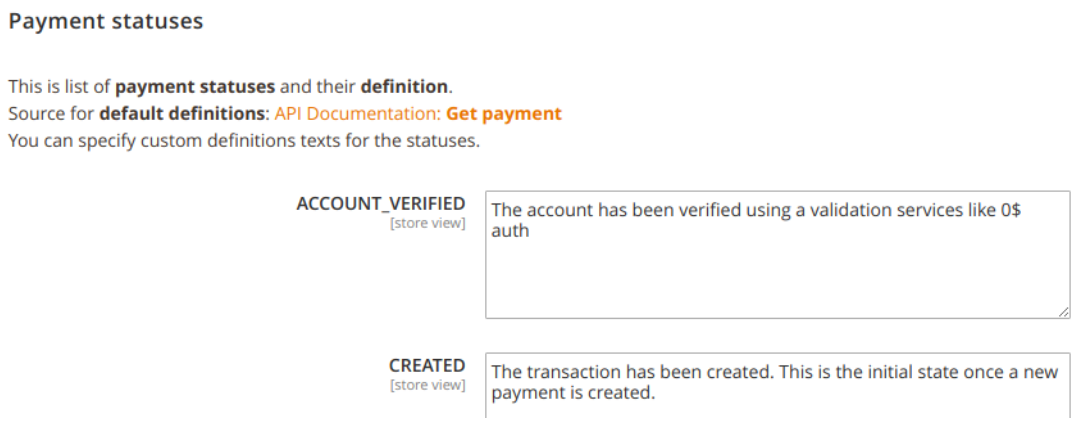



#### Please note

If Magento® 2 doesn't allow saving the configuration, check if the field contains an email address.

### 3.3.8 Payment statuses frontend output

In the section *Payment statuses* you will find a list of payment statuses and their more user-friendly definition texts.



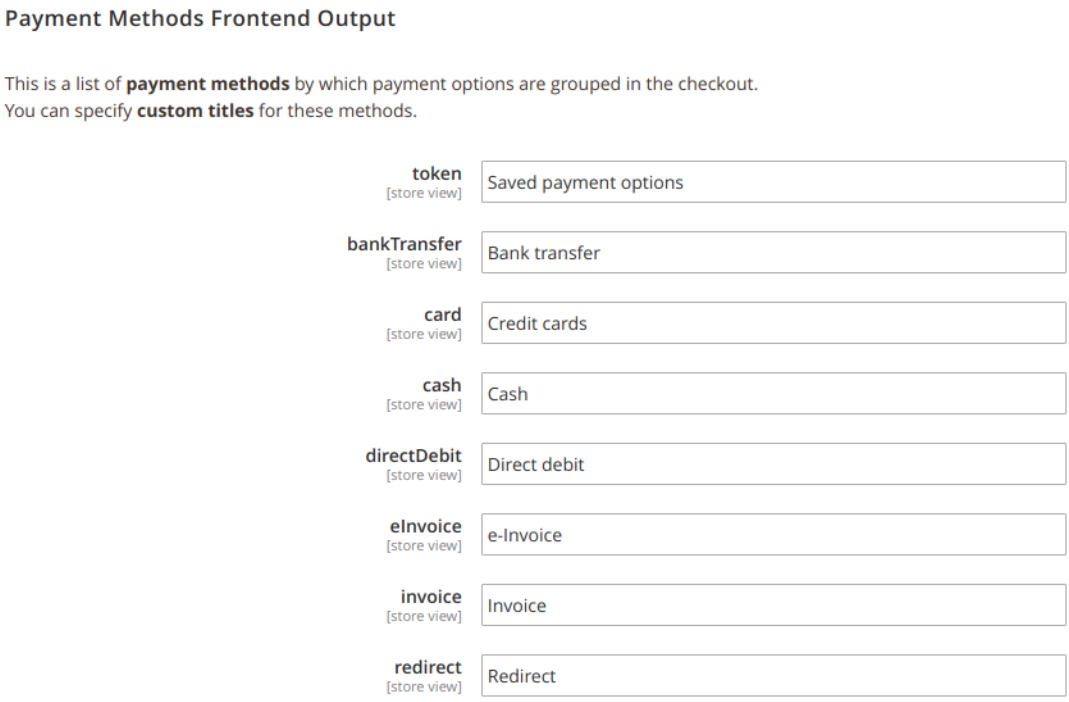

These definition texts will be displayed to the customer after making a payment in the Magento® 2 checkout.

You can (and probably should) modify the status definition texts on the Store View level according to your needs.

The default definitions are provided by Ingenico ePayments. If you need to know the original values, you can find them in the Ingenico ePayments API Documentation.

### 3.3.9 Payment methods frontend output

The section *Payment methods* contains a list of payment method groups and their display name in the checkout.

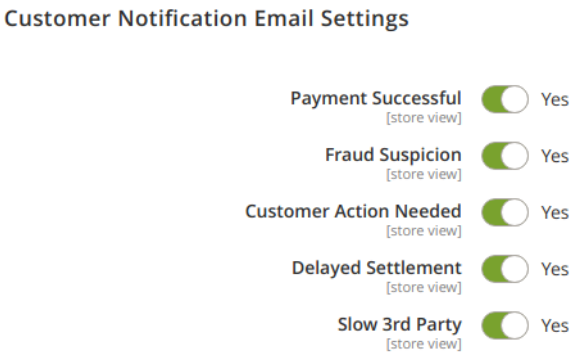



These names (titles) will be displayed to the customer for grouping the available payment methods by type in the Magento® 2 checkout.

You can modify these names on the Store View level according to your needs.

### 3.3.10 Customer notification Email Settings

You can configure when to notify a customer about the status of their payment in the *Customer notification Email Settings* section.




If one of the options is set to *Yes*, the customer will automatically receive a notification email when their payment gets the corresponding status.

# 4 Workflow and features

## 4.1 Order workflow

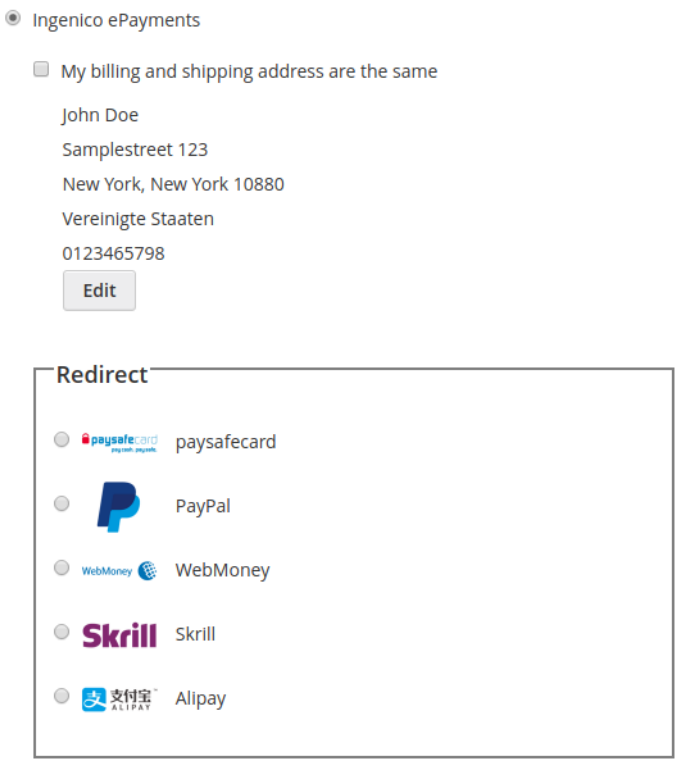
This section describes the standard workflow of an order when using Ingenico ePayments. Special cases and actions will be documented in their respective chapters.

### 4.1.1 Order placement

If the Ingenico ePayments payment method is enabled in the section Account Settings, the shop customer can select the payment method in the checkout.

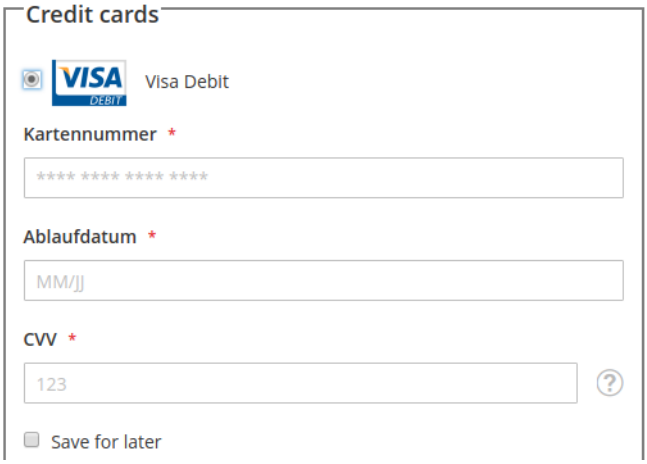
The name of the payment method can be configured in the General Settings section.

If this payment method is selected, it offers a dynamic list of payment products, depending on the customer's billing address country, order amount, and the configured Ingenico ePayments endpoint.



Some payment products allow entering the payment information directly in the checkout (inline payment).

If inline payments have been enabled in the Checkout Settings and the selected payment product supports this, input fields will appear.




The payment data gets sent to your Magento® 2 instance as encrypted string and will be forwarded to the Ingenico Connect Server API upon order placement.

After placing an order with an Ingenico ePayments payment method, the customer gets to the checkout success page, or to an external page to enter the payment information. The external page is hosted by Ingenico ePayments.

Afterwards confirming the payment, the customer is redirected back to Magento® 2 and will see the status message from the Payment statuses frontend output section, depending on the status of the payment.

- If the Capture Settings are set to *Delayed settlement*, the status should be *PENDING_CAPTURE* or *PENDING_APPROVAL*.
- If *Direct capture* is configured, *CAPTURE_REQUESTED* or *CAPTURED* indicate a successful transaction.

The next section explains how to deal with those statuses.

### Styling the external payment page

If you want to customize the look and feel of the external payment page, have a look at Ingenico's Hosted Payment Page documentation.

### 4.1.2 Capture (create invoice)

If you are using the default *Delayed Settlement* capture mode (see section Capture Settings), Orders that are processed with Ingenico ePayments have to be manually captured (approved) by the merchant.

This is done by creating an invoice in Magento® 2.

> **Important: use *online* capture**
>
> Make sure that *Capture Online* is selected in the *Amount* box when creating the invoice. Otherwise, the capture will not be registered by the Ingenico ePayments platform.
>
> **If you don't use online capture, the payment flow will be interrupted!**

Creating the invoice in Magento® 2 (with *capture online*) starts the capturing process on the Ingenico ePayments platform. However, the funds will most likely not be transferred immediately, which means:

- the order state will be *PAYMENT_REVIEW*,
- the invoice status will be *PENDING*.

This will change after some time, as soon as Ingenico ePayments reports the capture as complete. When the payment status is set to *CAPTURED* by Ingenico, these things will happen:

- the order state will be set to *PROCESSING*,
- the invoice will be marked as *PAID*,

- the funds are transferred to the merchants account.

From now on, it is possible to perform a *Refund*. This is explained in the next section.

### Refresh payment status

You can quickly "pull" the current payment status from the Ingenico ePayments platform using the *Refresh Payment Status* button on the order details page. See also the section Order update.

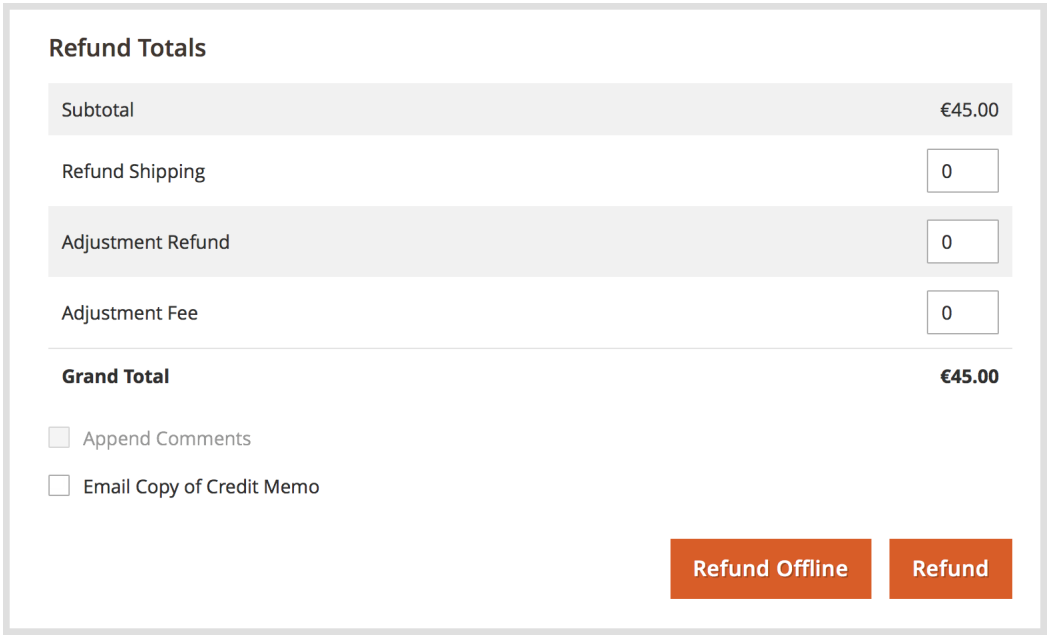
### 4.1.3 Refund (create creditmemo)

You can trigger refunds on the Ingenico ePayments platform using the Magento® 2 standard refund function.

To see if a payment can be refunded, you can check its Transaction information. Look at the value *isRefundable* in the table.

Follow these steps to make a refund:

- Go to the order details page.
- **Important:** You must open the invoice you want to refund.
- Then select *Creditmemo* from the top menu.
- Adjust the refund amount if needed, and select *Refund* at the bottom of the page.




#### Important: use *online* refunds

Do **not** choose *Refund Offline* when creating a credit memo. Only online refunds will be registered with the ePayments platform.

If you select *Refund offline*, the buyer will not get their money back.

Similar to captures, refunds will not be processed immediately. There will be a slight time delay.

Refunds through the GlobalCollect endpoint must be explicitly approved (confirmed) on the Credit Memo details page.

As long as the refund is in status *PENDING*, it can be canceled on the Credit Memo details page.

### 4.1.4 Cancel orders

Orders that were created using the Ingenico ePayments module can be cancelled with the Magento® 2 standard cancel function.

If possible, this will cancel the order on the Ingenico ePayments platform as well.

To see if a payment or refund can be cancelled, you can check its Transaction information. Look at the value *isCancellable* in the table.

Denying a *Suspected Fraud* order will also result in a cancellation, as explained in the section Fraud handling.

#### Difference between Cancel and Void

For details on what *Cancel* and *Void* mean, have a look at the section Difference between Cancel and Void operations.

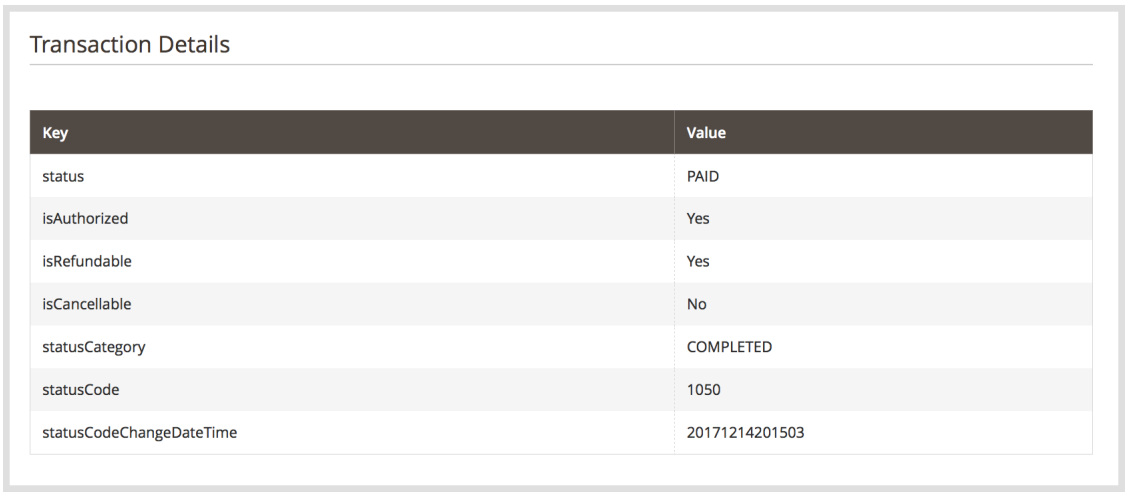
## 4.2 Additional features and tips

### 4.2.1 Transaction information

You can look up detailed information about the status of a payment in the Transaction Details:

- Open an order.
- Select *Transactions* from the sidebar.
- Click on a transaction entry in the list.

This shows in-depth details about the transaction status. The data received from the Ingenico ePayments platform is shown in the *Transaction Details* table.


Transaction Details

| Key | Value |
|---|---|
| status | PAID |
| isAuthorized | Yes |
| isRefundable | Yes |
| isCancellable | No |
| statusCategory | COMPLETED |
| statusCode | 1050 |
| statusCodeChangeDateTime | 20171214201503 |

Depending on whether you created an order using the GlobalCollect or Ogone platform, you might see multiple transactions for each stage of the payment, or just one *Authorization Transaction* that holds the current status of the payment.

Refunds create separate transactions which show the current status of the refund.

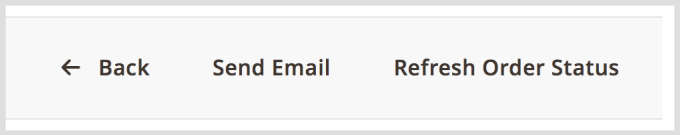
### 4.2.2 Order update

A payment or refund status can get updated automatically via Webhooks.

Alternatively, there are these additional ways to get status updates from the Ingenico ePayments platform:

#### 4.2.2.1 Update an order manually

Click the *Refresh Payment Status* button at the top of the order details view. You will see a message if any changes were found, and the order status will be updated accordingly.




#### 4.2.2.2 Update order automatically

A *Cronjob* is executed every 5 minutes and will query the Ingenico ePayments platform for updates to your orders. The process behind this is similar to the manual order update.

You can configure the Magento® 2 Cron functionality here:

```
System → Advanced → System → Cron (Scheduled Tasks)
```

This also lets you configure a log file that will be stored in the Magento® 2 folder `var/log/`. The log shows information about past automatic order updates.

The Cronjob can also cancel unpaid orders that have not been updated in a certain time. See section Cancellation of Pending Orders on how to configure this feature.

### 4.2.3 Fraud handling

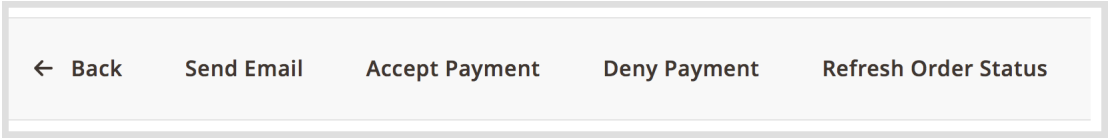
Ingenico ePayments offers automatic Fraud Detection.

If Ingenico has detected a possible fraud:

- The transaction will show a *FRAUD_SUSPECTED* order status.
- A Fraud notification email will be sent to the fraud manager.

Payments that are in *Suspected Fraud* can only be processed further after being *approved* or *denied* by the merchant.

To approve or deny a payment, go to the order details page and use the buttons in the top menu.




The result will be:

- A denied payment will cancel the order, as explained in the section Cancel orders.
- An approved payment will make the order ready for Capture (create invoice).

### 4.2.4 E-Mail Notifications

You can configure if and when to inform a customer about the order status.

This can be used to keep customers up-to-date and manage their expectations. Please see the section Customer notification Email Settings on how to use this feature.

# 5 Uninstalling or disabling the module

To **uninstall** the module, execute this command from your Magento® 2 installation's root directory:

```
php ./bin/magento module:uninstall module-epayments-m2
```

If you only want to **disable** the module without uninstalling it, execute this command:

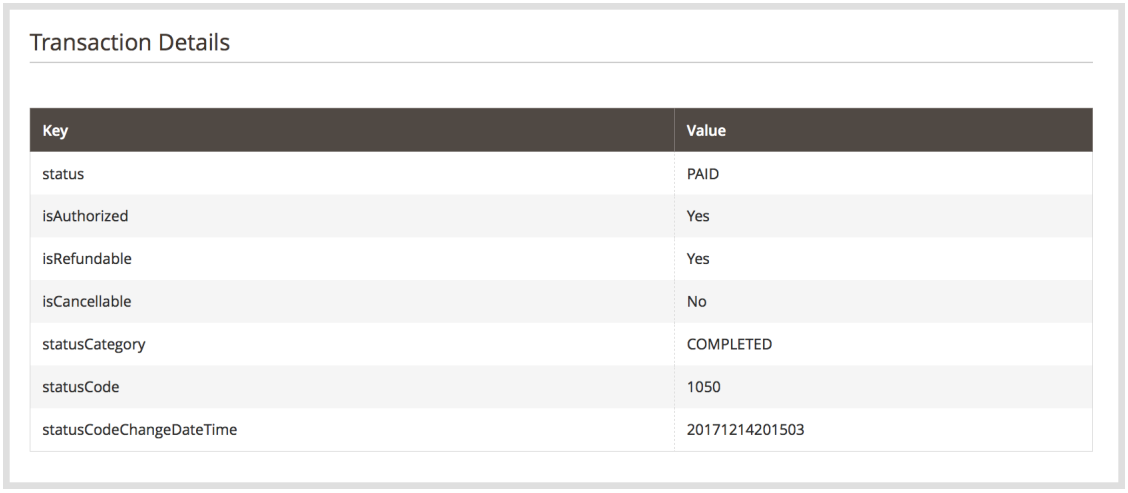
```
php ./bin/magento module:disable module-epayments-m2
```

# 6 Troubleshooting

## 6.1 Payment status not accurate

If you believe that the payment status of an order isn't correct or up-to-date, you should first try to refresh the order status with the *Refresh Payment Status* button (see section Order update).

If you need more information for debugging the problem, you can check the Transaction information from the order details page. Select a transaction and look at the *Transaction Details* received from the Ingenico ePayments platform.


Transaction Details

| Key | Value |
|---|---|
| status | PAID |
| isAuthorized | Yes |
| isRefundable | Yes |
| isCancellable | No |
| statusCategory | COMPLETED |
| statusCode | 1050 |
| statusCodeChangeDateTime | 20171214201503 |

## 6.2 Check log file

If you enabled logging in section Account Settings, you can download the log file using the link:

```
Configuration → Ingenico ePayments → Account Settings → Log All Requests → Download log file
```

The log file contains all messages to and from the Ingenico servers and may help finding the cause.

## 6.3 Technical support

In case of questions or problems, have a look at the Support Portal (FAQ):

http://ingenico.support.netresearch.de/

If the problem cannot be resolved, you can contact the Ingenico support team:

https://www.ingenico.com/epayments/support