# SUNePay Documentation

Overview

The purpose of this documentation is to introduce clients to the **SUNePay** system. The system integrates to a third party payment gateway and also integrates with the University's financial system. Because the system is fully integrated with the University's financial systems, a merchant can typically see the payment reflect almost immediately on their cost centre - this however depends on the payment method selected and how quick the client's bank processes the payment.

Basic High Level Flow of an online payment
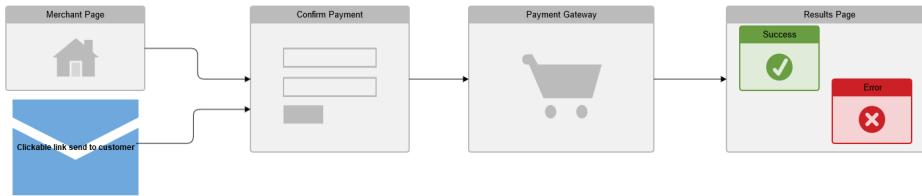
Merchant Page:
The first step would be a SUNePay QuickPay link that can be placed on a merchant website or can be send directly to the customer via email. Whether the customer clicks on the link directly or from within a merchant webpage, they will still be redirected to the Confirm Payment step. In scenarios where the merchant requires the customer to make a selection from a group of items to add to one payment transaction the merchant needs to make use of the Advanced integration method before the customer is redirected to the Confirm Payment step. See _Integration_ heading below for more information on this topic.

Confirm Payment:
The second step in the payment process is where the customer can see a summary of items being paid for as well as the amount due, complete their contact details as well as select a payment method (if more than one payment method is available) (e.g Credit Card, EFT, SnapScan, etc). On confirmation the customer will be redirected to the payment step.

Payment Gateway:
In the third step the customer will do the payment. At this step the customer is then redirected to a third party payment gateway who captures the payment details and completes the payment.

Result Page:
In this step the customer will be displayed a success message or an error message depending on the outcome of the payment made in the payment gateway.

Basic Business Process capturing of payment outcome and processing to Finance

This process is activated by the Payment Gateway via a process called IPN (Instant Payment Notification); some gateways will refer to this step as a "WebHook". In short - it is an URL that we provide to the payment gateway in order for them to send us the outcome of a customer payment. On successful payment processing to the financial system an email is send to both the customer and merchant. If an error occurred while processing the financial transaction, the merchant will be informed. If the payment couldn't be processed successfully on the payment gateway the customer and merchant is also informed via email - in this case the financial processing step will be skipped.
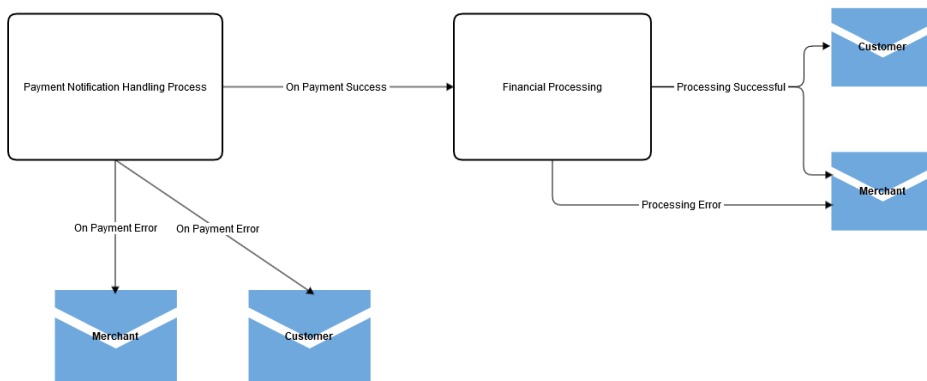
Terminology

- **Merchant** - This will be the department or entity that wants to sell items.
- **Merchant Item(s)** - The item the merchant wishes to sell. This could be in a form of a conference or possibly a global item type. This item will be how it will be reflected/identified on the financial systems as this item/category will be linked to a particular cost centre/account.
- **Payment Gateway** - This is a 3rd party provider, selected by the University, that will typically handle the clients' electronic payment. The University does not at any stage capture or request the client's credit card or banking details - this is handled by the Payment Gateway. **Please note: we only integrate with services that have been centrally procured by the University for the University as a whole - not per request.**

Merchant Registration Process[3]

Before a **Merchant Item** can be sold via SUNePay, it and the **Merchant** must first be registered on the system. The registration consists of one or two processes depending on the status of the **Merchant**.

1. Merchant
   a. When you are registering as a first time merchant on the system, the following information is needed:
      - Name *(Displayed to the Client)*
      - Description *(Displayed to the Client)*
      - Email address *(Displayed to the Client)*
      - Email Notifications [Y/N] *(Will be used in the case of payment notifications - when the merchant wants to be notified each time a item has been paid for.)*
      - Responsible US Number *(This is the responsible person for the department/merchant and not for the individual merchant item (event/service). This could typically be the financial person of the merchant.)*
      - Department *(preferably the OU Code)*
      - Notification Endpoint URL *(Not compulsory)(A Endpoint URL is provided which can be used to post information to after the payment process has completed - e.g if the merchant needs to update internal processes or databases)[1]*
      - Payment Methods *(The available methods will be provided - you can choose which method(s) can be made available for the client. Transaction costs differ depending on which payment method you choose)*
   b. When you are an existing merchant you need to confirm that the information captured is still correct.

2. Merchant Item.
   a. After confirmation of merchant process an item can be added. <u>For every item</u> the following information bust be given:
      - Cost Centre
      - Account Number *(Financial account)*
      - Project Number *(If applicable, but not compulsory)*
      - Name of product *(Displayed to the Client)*
      - Description of product *(Not compulsory)*
      - Start date
      - Expiry date
      - Amount *(Not compulsory - but required if you want to use the "QuickPay" integration method, see below)*
   b. After the above information is captured the information is submitted for approval. The merchant will receive an email once the product has been approved.

Integration

At the moment, two methods of integration is provided depending on the needs of the merchant.

1. SUNePay QuickPay
   With this method we will provide the merchant with a link for each registered item. This can typically be used for an item where a fixed amount is registered against the item. Consider the following examples:
      - Conference ABC - Early bird - R400
      - Conference ABC: R600
      - Conference ABC + Food : R750.
   a. For each of the above products you will have to register the item. We will then send you three links that you can use on your website. The client will click to pay the one they select and be redirected to the SUNePay interface.[2]

2. Advanced Integration.
   This option will require technical integration and programming - so a programmer resource knowledgeable in Java or REST Service programming will be required. We provide an API (Application Programmer Interface) as a REST/JSON interface and include a Java-based SDK for easier integration. Technical documentation will be provided if this option is required.

Notes

1. Future implementation.
2. The SUNePay QuickPay integration is for payment of **one and only one item** - you CANNOT select a quantity of a particular item or group a list of quick pay links and pay a total amount. If you require this kind of payment then you need to use the advanced integration option where you provide all the options for the user/client on your own website and integrate using the advanced integration method.
3. An Admin system will be launched in a future phase that will facilitate the registration process.