

# PaperCut | Payment Gateway Module

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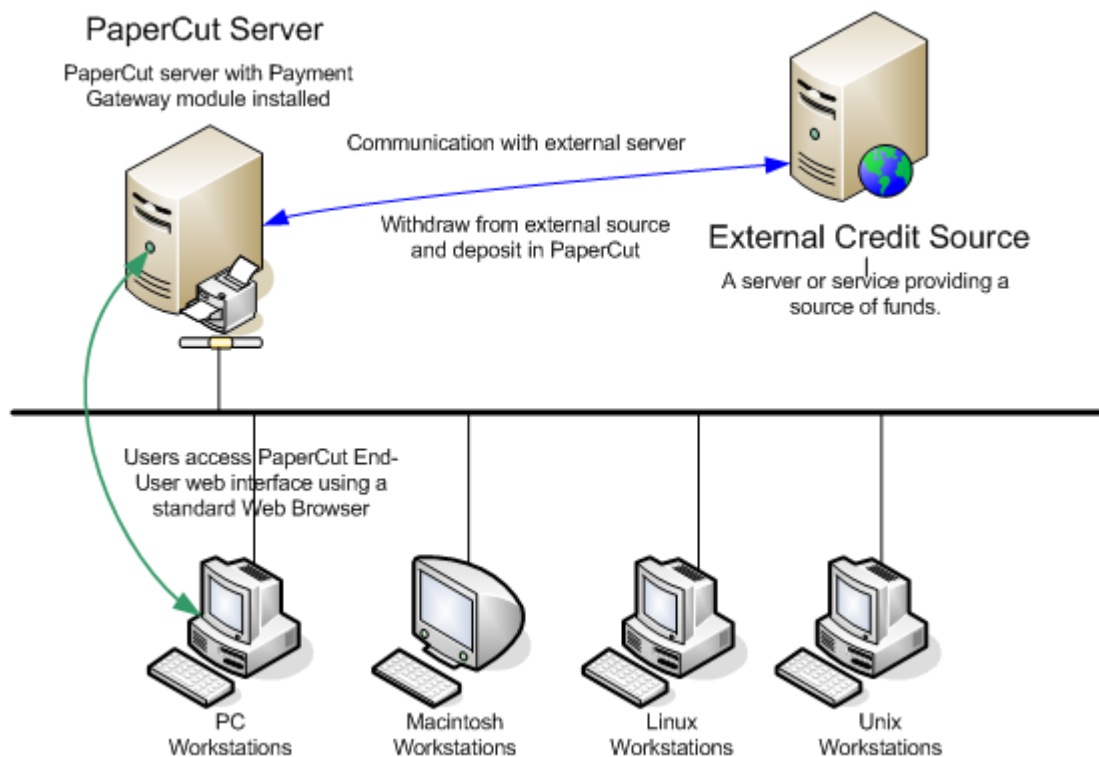
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# 1 Payment Gateway Module overview

This document discusses the PaperCut MF Payment Gateway Module configuration and use. Use this document in conjunction with the Quick Start Guide for your preferred gateway type.

The PaperCut MF Payment Gateway Module is an additional component that provides services to allow users to transfer funds from an external source into their personal PaperCut MF account. The Payment Gateway Module supports a number of external sources out of the box and others can be quickly added. Contact PaperCut Software or your supplier for further information and documentation about integration with your preferred credit source.



Examples of its use include:

- **Online Payment**  
Large organizations, such as, universities or colleges, can provide online payment via 3rd party services provided by banks or organizations such as PayPal. You can limit the payment interface to internal use, for example, student-only use), or open it up for external access to allow parents to make payments via the web. The Payment Gateway Module can connect with a number of leading service providers or can be quickly adapted to fit others.
- **Student Fee/Management Systems**  
A number of leading higher education organizations use the Payment Gateway Module to allow students to transfer small amounts of credit into their print account. At the end of semester or term, this amount is totaled up and added to their fees or loan. You can configure the Payment Gateway Module to automatically debit the student management records or an external database system.
- **Cashless Systems**  
Organizations that use a centralized Point of Sale (POS) system to manage cashless payment can benefit from the PaperCut MF Payment Gateway. These systems provide a database of users and interfaces/API's to withdraw funds from a centralized database. The Payment Gateway Module can be configured to use these API's to transfer/withdraw funds from a central database.

- **Custom Applications**

The Payment Gateway Module supports plug-ins and can quickly be customized to support other 3<sup>rd</sup> party systems. Customization can be performed by either PaperCut Software or internally using your own development staff/skills. Contact PaperCut Software for development options and/or API documentation.

## 2 Install the Payment Gateway Module

The Payment Gateway Module is licensed separately to PaperCut MF. Contact PaperCut Software or your supplier for licensing options. The licensing costs vary depending on the type of interface you use, as some external systems charge for external API access.

1. Download the Payment Gateway Module that is compatible with your version of PaperCut MF. For more information, see <https://www.papercut.com/kb/Main/SettingupthePaymentGateway>
2. Install the Payment Gateway Module.

- **Windows:**

Run and complete the installer, following the prompts.

- **Other platforms:**

Extract the contents of the archive to `[app-path]/server/lib-ext/`.

3. In a text editor, such as WordPad, open the following configuration file:

```
[app-path]/server/lib-ext/ext-payment-gateway.properties.
```

4. Modify any of the settings as required (see below for description).
5. Configure the external credit source. For some payment interfaces, the configuration is done in PaperCut MF via a config file for example, `ext-payment-gateway-yourgateway.properties`). For other payment interfaces, the configuration is done in the external source. Refer to the relevant *Payment Gateway Quick Start Guide* provided when your module was licensed.

### 2.1 Global Configuration Options

The following configuration options are set in the `ext-payment-gateway.properties` file, and apply to all payment gateway modules.

- `no-access-message`

The message that is displayed to the user when access is denied due to group settings defined in `allowed-groups`. Explaining why the user is unable to access the feature is advised. For example, "Only full-time students have access to this feature". Normally however group based access control will remove the "Add Credit" link and hence will never see this message as they can't easily gain access to the page.

- `user-error-message`

Defines a message displayed to the user when an error occurs. It is useful to provide information on who to contact if the problem persists.

- `transaction-comment`

Defines the format of the transaction comment that is displayed in user logs. This can contain token `%id%`, which is automatically expanded to the transaction ID, for example, `transaction-comment = External funds added by payment gateway (%id%)`

## 2.2 Common Configuration Options

The following configuration options are available on most gateway types/sources, and are edited via the config file for the specific gateway type (for example, `ext-payment-gateway-yourgateway.properties`).

- `module.page-title`

This setting allows you to change the name of the link that is displayed in the left navigation menu of the User web interface. The default link is titled Add Credit.

- `module.page-heading`

This setting allows you to change the name of the Add Credit page. The default heading is Add credit using Credit Card.

- `module.allowed-groups`

You can restrict access to the module's services to a selected group of individuals in the organization. An example would be limiting access to full-time students only (members of the Full Time Students group). Group names correspond to groups from the directory, such as, Active Directory or LDAP, that have been imported into PaperCut MF.

- `module.allowed-amounts`

This setting allows you to specify the fixed amounts that users can transfer. The fixed list ensures that users are unable to accidentally transfer too much in the one operation.

## 2.3 Allow external access to the User web interface

On a standard network the User web interface is accessible only to internal computers. However, you might want to allow external access to the interface so that users can add credit from home, or parents of students can log in and use their credit card. To enable external access, open up port 9191 or 9192 (the SSL port) on the organization's firewall. For example:

```
[external address]:9192 → [internal server]:9192
```

Some gateway types might require additional ports. For more information, see the relevant *Payment Gateway Quick Start Guide*.

## 2.4 Configure the job quota for users with negative internal credit

**Note:** This applies only to PaperCut MF.

Before a user starts using device functions (e.g. copy or fax), PaperCut MF calculates the user's job quota. Zero Stop then uses this calculated job quota to allow or prevent the user from starting or continuing an actual job.

PaperCut MF calculates the user's job quota based on the user's available credit:

- PaperCut MF **My Personal Account** (i.e. internal credit)
- Payment Gateway (i.e. external credit)

By default, if a user's internal credit is positive (i.e. above 0), then the user's job quota is the user's external credit *PLUS* user's internal credit.

For example:

*External credit = \$20.00*

*Internal credit = \$5.00*

*Job quota = External credit (\$20.00) **PLUS** Internal credit (\$5.00) = \$25.00*

However, if a user's internal credit is negative (i.e. below 0), then the user's job quota is *ONLY* user's external credit.

For example:

*External credit = \$20.00*

*Internal credit = \$-5.00*

*Job quota = External credit **ONLY** = \$20.00*

With Papercut MF 19.0.4 or above, you can change the above job quota calculation for users with a negative internal credit:

1. Log in to the PaperCut MF Admin web interface.
2. Navigate to **Options**.
3. In the **Actions** menu, click **Config editor (advanced)**.
4. Edit the following config key:

Config key	Description
<b>payments-quota-includes-negative-user-balance</b>	<p>Configure the job quota calculation for users with a negative internal credit.</p> <ul style="list-style-type: none"><li>• Values:<ul style="list-style-type: none"><li>○ Y (job quota = external + internal credit)</li><li>○ N (job quota = external credit only)</li></ul></li><li>• Default: N</li></ul> <p><b>Note:</b> This applies only to PaperCut MF 19.0.4 or above.</p>

## 3 Using the Payment Gateway Module

Users can add credit to their accounts and view transactions via the User web interface.

### 3.1 Add credit to a user account

Users can add credit to their own user account via the User web interface.

1. Log into the PaperCut MF user web interface via <http://server:9191/user> or via the **Details** link on the client.
2. Click **Add Credit**.

**Add Credit using PayPal**

This feature will allow you to top up funds from your PayPal account into your printing account.

Username	debbie
Current Balance	\$0.00
Amount to add	-- Select the amount ---

[Add Value](#)

3. In **Amount to add**, select the amount to add to your account.
4. Click **Add Value**. or **Continue**.

Some gateway sources apply the value immediately, while others, such as Credit Card payment gateways, require further steps, such as card number entry and validation. Follow the steps on the screen as appropriate.

### 3.2 View payment transfers

All transfers to a user's account are recorded in the user's transaction log. This log of activity is useful for resolving problems or auditing transactions.

To view the transaction log:

1. Log into the PaperCut MF user web interface via <http://server:9191/user> or via the **Details** link on the client.
2. Click **Transaction History**.

**PaperCutMF**

**Transaction History**

Filter on [\[edit\]](#) [\[remove\]](#)

Transaction Date	Account	Transacted By	Amount	Balance After	Transaction Type	Comment
Jul 1, 2016 11:03:05 AM	Default	debbie	\$10.00	\$10.00	Payment gateway	Funds added from student loan.

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