

PaperCut | PaperCut Payment Gateway Module - Payment Gateway Module - NuVision Quick Start Guide

This guide is designed to supplement the Payment Gateway Module documentation and provides a guide to installing, setting up and testing the Payment Gateway Module for use with NuVision iAMECS. The main Payment Gateway Module documentation may be downloaded from:

<http://www.papercut.com/files/pcng/ext/payment-gateway/PaymentGatewayModule.pdf>

IMPORTANT: *You should have an active NuVision iAMECS server set up before installing the payment gateway module.*

This document is written assuming the reader has good server administration skills and is experienced with general PaperCut administration.

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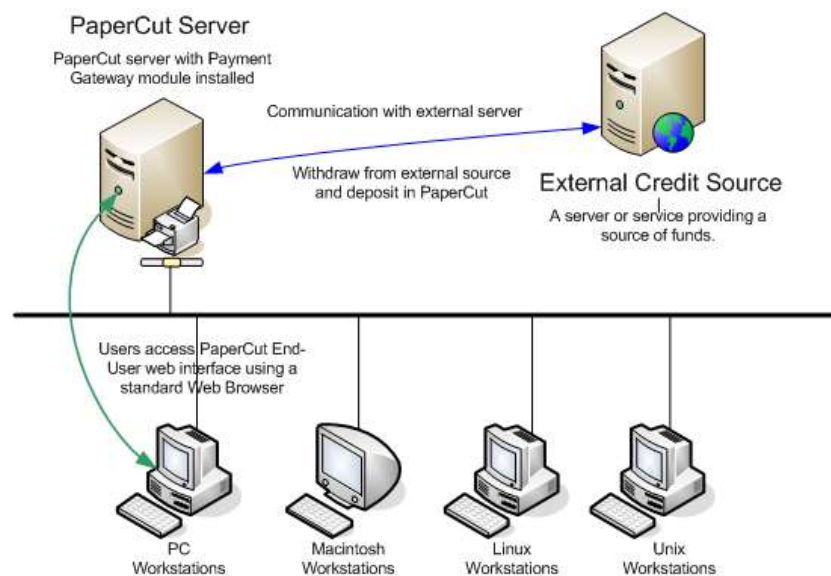


1 Introduction

NuVision iAMECS is a campus card payment/transaction system. The PaperCut payment gateway module for NuVision allows students to pay for printing from their NuVision account.

2 Architecture

The solution is designed with security as the number one objective. All communication with the NuVision iAMECS server (as the external credit source) is made via the PaperCut Server. No client software is used. Communication with end-users is encrypted using SSL/TLS browser encryption.



NuVision integration architecture

Before installation of the payment gateway module begins you should contact your NuVision account manager. Configuration may be required on the NuVision side to allow PaperCut to integrate. At a minimum you will need a **shared secret / password** provided by NuVision.

You will also need to know key information about your NuVision iAMECS server including its **IP address**, **port number** and the **type of account** user balances are stored on within NuVision (e.g. "DECLINING").

Setup and testing time for basic integration should take around 30 minutes. Other factors such as managing/importing/syncing of card numbers may take longer and time should be allocated accordingly. No system level restart is required; however, the PaperCut application server will be restarted during the install process. If other administrators are using the PaperCut administration interface at this time, it may be advisable to warn them of the pending restart.

3 Payment Process Workflow

The following sequence of events occurs when a user adds credit to their PaperCut account from NuVision:

1. User logs into the PaperCut user web interface.
2. User clicks on the Add Credit link.
3. User chooses the amount they would like to add and clicks **Add Value**.
4. PaperCut executes a helper file called “nuvision.exe”. This makes use of a library “ComConnect.dll”, provided by NuVision.
5. The ComConnect library establishes a new connection with the iAMECS server and performs the transaction. The amount the user had added is available immediately.
6. The connection is closed and the “nuvision.exe” process ends.

4 Assigning NuVision Card Numbers to Users

PaperCut needs to be able to find the card/id number for NuVision accounts/cards to be able to perform transactions against them. This will either involve populating the card/id field on users in PaperCut, or looking up the card numbers in an external database. Card numbers may be imported into PaperCut from Active Directory/LDAP, or imported from a text file. See the PaperCut user manual for more information.

For assistance or advice on managing card numbers please contact NuVision and/or your reseller or Authorized Solution Center. You can find their contact information in your PaperCut Admin interface on the **About** page.

5 Installing the Payment Gateway Module

1. The Payment Gateway Module will function during the PaperCut NG 40-day trial period. After this, the module must be licensed. If you have been supplied with a new license take the time to install this now. The license install procedure is documented in the PaperCut user manual chapter ‘Licensing and Support’.
2. Download the Payment Gateway Module from the PaperCut website at <http://www.papercut.com/files/pcng/ext/payment-gateway/pcng-payment-gateway-module.exe>
3. Install the module into the same directory as PaperCut. This is normally:
C:\Program Files\PaperCut NG\
4. Start a command prompt in administrator mode (“Run as administrator”) and register the DLL at [app-path]\server\lib-ext\ComConnect.dll. E.g.:

```
cd C:\Program Files\PaperCut NG\server\lib-ext
```

```
regsvr32 /i ComConnect.dll
```

5. Open the file:
[app-path]\server\lib-ext\ext-payment-gateway-nuvision.properties

in a text editor such as Notepad.

6. Locate the line `nuvision.enabled=N` and change the `N` to `Y`. This will enable the NuVision module.
7. Locate the line `nuvision.server-ip=` and enter the IP address of your NuVision iAMECS server.
8. Locate the line `nuvision.server-port=` and enter the port number for your NuVision iAMECS server.
9. Locate the line `nuvision.shared-secret=` and enter the shared secret / password as provided by NuVision.
10. Locate the line `nuvision.account=DECLINING`. If user balances are stored on a different type of account within NuVision you will need to change “DECLINING” to one of the other available types. Contact NuVision for further information.
11. Locate the line `nuvision.terminal=` and enter a terminal number that will be used for the PaperCut integration. This number is used for reporting purposes within NuVision.
12. Configure other options in this file as discussed in General Configuration Options in the *Payment Gateway Module* documentation, or by referring to the comments in the file itself. Options include limits on the amount to transfer and access groups.

You may like to enable a group restriction to limit access to administrators until configuration is complete.
13. Save the file and exit the text editor.
14. Restart the service *PaperCut Application Server* via `Control Panel -> Administrative Tools -> Services` and wait 30 seconds.
15. Check the end of the log file at `[app-path]\server\logs\server.log` for any obvious error messages.

6 Testing

The Payment Gateway Module is now ready for testing. Testing involves performing a transaction with a test or “live” user who has a valid NuVision card number.

1. Log into the PaperCut user web interface, e.g. `http://papercut:9191/user`
2. A new link called **Add Credit** should be present on the left. Click this link.

3. Select an amount to add and click **Add Value**.

Add credit using CommWeb

Username	tim
Current Balance	\$127.00
Amount to add	<input type="text" value="\$5.00"/>
<input type="button" value="Add Value"/>	

4. If the transaction was successful the amount should become immediately available and a success message will be displayed. Otherwise, note the error message and see the Troubleshooting section.

7 Go-Live

If a group restriction was enabled in section 4 it can now be removed or altered to allow access to end-users.

8 Troubleshooting

Administrators may find information in the following log files useful when trying to troubleshoot setup/configuration problems or issues reported by end-users.

Payment Gateway Event Log:

[app-path]\server\logs\payment-gateway\event.log

This log contains gateway specific error messages and events.

Application Log:

[app-path]\server\logs\server.log

This log contains general application specific error messages and events.

Transaction Log:

[app-path]\server\logs\payment-gateway\transaction.log

This log contains a list of successful transactions in a tab-delimited form.

Contact your reseller or Authorized Solution Center for assistance. You can find their contact information in your PaperCut Admin interface on the **About** page.