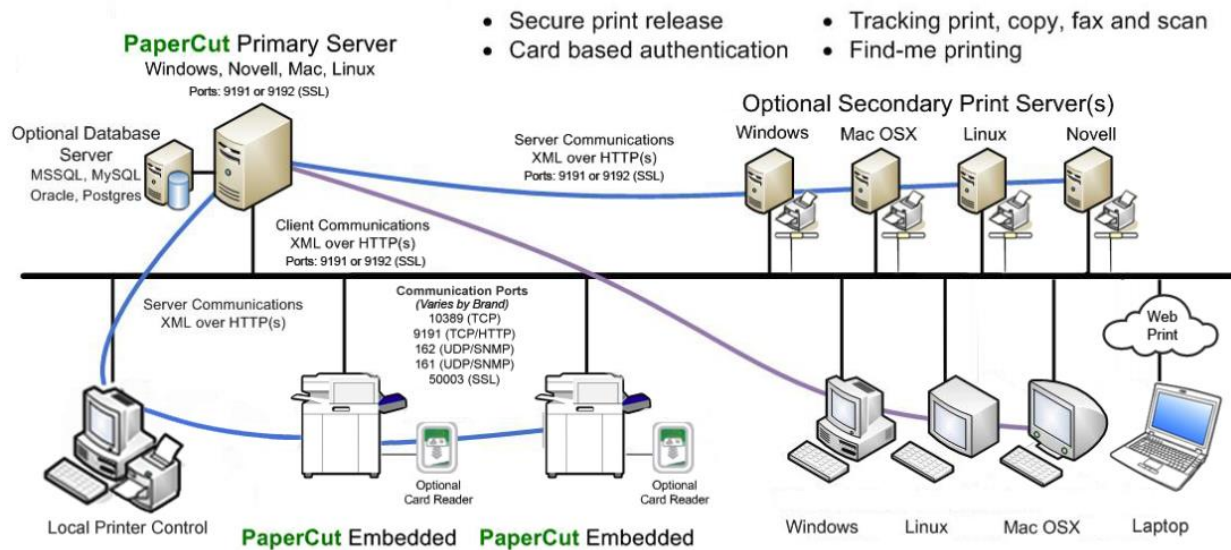


System Architecture



- Secure print release
- Card based authentication
- Tracking print, copy, fax and scan
- Find-me printing

PaperCutMF is a server-side application which will become an integral part of your IT infrastructure. PaperCutMF is a 100% web based application. Full system administration can be performed from anywhere on the network via a standard web browser - no special admin software is required! Access is granted to the built-in admin, or to any user that has been granted administrator level access.

Application Server (Primary Server)

An application server is a server program responsible for centrally processing “business logic” and providing services to end-users. PaperCutMF uses the application server model to provide a “business logic” unit for calculating user costs and providing a web browser interface to end-users.

Installation: Local Application Installer provided during Implementation, the installer for a specific OS is downloaded from an FTP.



PaperCut is a cross Platform Application: Win, Mac, Linux, Novell

Configuration: All printers, MFDs and users/groups configuration is performed at the Application Level.



The Application Server Module can also be installed in a Print Server.

Minimum Specs: *Windows 2008 / 2008 R2 / 2003 / 2000 / *Windows 7* / Vista* / XP* (core, server, advanced server, enterprise edition, 64-bit edition, workstation*, professional* versions all supported)



Microsoft Clustering Services supported at all application layers.

Application Server Spec: Running on a VMWare environment

- * RAM = 2 GB (4 GB Better)
- * CPU = 2 x 2.66 GHz (4 CPUs Better)
- * Hard Drive = 60 GB to 100 GB (Standard)
- * OS (is it 64-bit windows) = Windows 2008 Ent. R2 64-bit
- * Data Base: Internal up to 5k users. Running Externally? =MS SQL 2005
Note: Cluster Environment compatible.
- * Network speed = Existing

Print Server (Print Provider)

A print server is a system responsible for hosting print queues and sharing printer resources to desktop clients/workstations. Users on the workstations submit print jobs to a print server rather than directly to the printer. A print server may be a dedicated server but on most networks this server may also perform other tasks such as file serving.

Installation: Same Application Installer used above for the APP Server provided during Implementation, the installer for a specific OS is downloaded from an FTP.



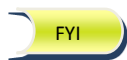
PaperCut is a cross Platform Application: Win, Mac, Linux, Novell

Configuration: None, PaperCut configuration is only at the Main APP Server



The Application Server Module can also be installed in a Print Server.

Minimum Specs: *Windows 2008 / 2008 R2 / 2003 / 2000 / *Windows 7* / Vista* / XP* (core, server, advanced server, enterprise edition, 64-bit edition, workstation*, professional* versions all supported)



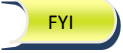
Microsoft Clustering Services supported at all application layers.

Print Providers: Running on a regular Server Rack (Dell)

- * RAM = 2 GB
- * CPU = 2 x 2.66 GHz
- * Hard Drive = 100 GB to 300 GB (It depends on the space needed to hold print jobs in queue and the number of printers hosted in the print server)
- * OS = Windows 2008 Ent. R2 64-bit
- * Network speed = Existing

User ID/Username

In a multi-user environment, users log on to a network or computer using a username and password. These are often managed by services such as Active Directory or LDAP. The username is known as the user's identity. PaperCutMF uses this identity to track printing.

 Laptop users will require network authentication in order for Admin to install the printers and run the PaperCut Client before they are able to print.

Step 1: Once Laptop Users have access to the Office network, they browse to the PaperCut Server: WINDOWS START: [\\PaperCutServer](#)

Step 2: Employees authenticate using their active Directory Credentials. After authentication is valid a script runs in the background installing the Printers and executing the PC_Client.exe from a share Folder.

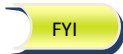
Client/Server Model

Client software is a small program that runs on each workstation and communicates with a server. The printing process on most networks works on a client/server model with clients (workstations) submitting jobs to a server. PaperCutMF also uses optional client software to help provide information to end-users.

Installation: Zero Client Installed for PCs and Local Install required for Mac Computers

Configuration: None, all configurations are performed at the APP Server Level

Minimum Specs: None. All modern PCs and Macs work

 The zero-install option is suitable for networks running modern operating systems such as Windows 2000 and Windows XP. The UIT (PCClient.exe) can simply be run directly from the PCClient share on the PaperCut APP Server. Typical methods for starting the program include:

Group Policy Logon Script (For IT only, users do not see this as it runs in the background)

Use the group policy template to define the PCClient.exe as a program to be run on Logon. This is done via to policy located under:

```
cmd /c "start \\servername\PCSetup\PCClient.exe /silent"
```

Alternatively a line can be added to the user's logon script under:

User Configuration->Windows Settings->Scripts (Logon/Logoff)->Logon

To run the program as part of the logon process.

Batch File:

```
cmd /c "start \\servername\PCSetup\PCClient.exe /silent"
```

VBScript:

```
Set WshShell = WScript.CreateObject("WScript.Shell")  
  
WshShell.Run "\\server_name\PCSetup\pcclient.exe /silent"
```

All Users StartUp Folder Option

On each workstation create a shortcut to \\servername\PCSetup\PCClient.exe in the "All Users" Startup folder. This folder is usually located at C:\Documents and Settings\All Users\Start Menu\Programs\Startup. The program will then run whenever a user logs into the workstation.

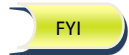
MFD Embedded Software

MFD Embedded Software is a small program that runs directly on each multifunction device (MFD) and communicates with the PaperCutMF Application Server allowing walk-up copier users with the same set of rich application features provided in the print control area.

Installation: Local installation required at the Copier Device (MFD)

Configuration: None, all configurations are performed at the APP Server Level

Minimum Specs: Varies per manufacture. I.e. RICOH requires support for JAVA.



Users authenticate at the MFD using their Username and Password, alternatively a Card Reader may be integrated for faster authentication using an Employee ID card.

