# PaperCut

## PaperCut MF 15



Features & Productivity

Usability

IT Admin & Security

Support & Training

Value

**Competitive Range**
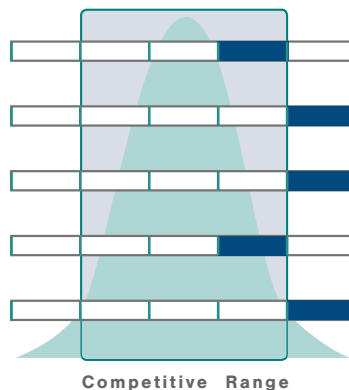
## Product Snapshot

**Product:** PaperCut MF

**Version:** 15.2

**Software Developer:**
PaperCut Software International Pty. Ltd.

**Web:** www.papercut.com

**Phone:** 1-800-819-5329 (U.S.)

**For more information on PaperCut MF 15 and other PaperCut products, see BLI's comprehensive coverage at Buyerslab. com/Solutions.**

**About BLI:** Since 1961, BLI has been a leading test laboratory in the world of digital imaging equipment. BLI is completely independent in all of its testing processes and subsequent reporting. All of BLI's product evaluations are conducted by highly experienced employees in its on-site testing facilities in the United Kingdom and United States where hundreds of new copiers, printers, wide-format devices, scanners, faxes and multi-function (MFP) products are evaluated and reported on each year.

## OVERVIEW

Understanding print output—and its associated costs—is critical for organizations of all sizes. PaperCut MF is a cross-platform output-management and cost-recovery platform that facilitates tracking, accounting and billing of print, scan, copy and fax jobs. Its wide-ranging feature set lets it be used to quantify, recoup and reduce output costs across the organization, and the solution also delivers pull-printing and mobile-printing functionality to increase document security and enhance convenience for end users. The company also offers PaperCut NG, which performs the same tracking, accounting and billing functions but for an organization's print output only.

# Benefits

**QUANTIFY OUTPUT COSTS—**Accurate tracking of all printer and MFP activity allows organizations to see who is printing/copying what, while customizable reports show how much it all costs.

**RECOUP EXPENSES—**Departmental, user and client usage-accounting features let organizations bill internally or externally for output as appropriate.

**REDUCE COSTS AND SATISFY GREEN INITIATIVES—**Customizable print rules (such as the ability to enforce duplex printing and to convert color jobs to black-and-white) and end-user pop-up messages that encourage more cost-efficient printing quantifiably reduce an organization's hardcopy output costs, while usage quotas keep users from spending more than their allotment.

**ENHANCE DOCUMENT SECURITY—**MFP-resident software enables release of print jobs only when the user is at the MFP, so sensitive documents are not left in the output tray for others to see.

**STREAMLINE MOBILE PRINTING—**An iOS mobile print app and support for Google Cloud Print, email-to-print and printing from any modern browser allows IT personnel to enable printing from just about any mobile device.

**EASE BURDEN ON IT PERSONNEL—**An admin-friendly management console, complete with a handy Dashboard view and intuitive layout, makes administering the system a snap.

## OUR TAKE

Show us a school or business that doesn't have a print management system in place, and we'll show you an organization that is wasting money on hardcopy output. Even companies that are under an MPS (managed print services) contract with a service provider need their own in-house print management system, since most MPS dealer tools are designed to track—but not limit nor reduce—usage of the devices. And while there's no shortage of feature-rich output management platforms to choose from, finding one that won't break the budget or the back of your IT personnel is more of a challenge. That's where PaperCut MF shines: It delivers all the functionality the majority of organizations are likely to need in order to track, recoup and reduce hardcopy expenditures, but in an affordable package that is easy to deploy and administer.

In addition to the core accounting, cost-recovery and cost-reduction features, the solution delivers essential pull-printing functionality and mobile-print support. To enable the former and allow for tracking of walk-up activity at the MFP, PaperCut offers an embedded application that can run on devices from almost every printer manufacturer; indeed, it offers among the widest device support we've seen in an output management platform. Plus, PaperCut MF runs under a variety of network operating systems, making it a seamless fit with virtually all environments. Moreover, BLI analysts found that administering a PaperCut MF system is much easier than working in other leading print management offerings, and the platform does not require the installation of an end-user utility on each PC (although one is available if a customer prefers).

Compared to more complex and costly output management platforms, PaperCut MF does not deliver the breadth of features in any given functionality area. For example, it does not offer as granular per-page pricing schemes or as robust device-management tools as BLI has seen in other leading platforms, and the job-rules functions (for converting or re-routing jobs) require some scripting (although code recipe samples are included for common rules). Also, a few platforms now offer functionality not present in PaperCut MF, such as modules for scan capture/processing/routing from the MFP. But for organizations that need essential output management functionality in an easy-to-deploy, easy-to-use package that's also easy on the budget, PaperCut MF is hard to beat.

## Strengths

- Very affordable

- Easy to deploy and administer

- Most user-friendly administration console BLI has seen in an output management platform

- Does not require installation of local utility on user PCs (though one is available for organizations that desire it

- Embedded-app support for a huge range of printer and MFP makes

- Cross-platform network operating system support

- Support for printing from mobile devices is included

- Integrates with 19 online payment services, and open API allows the solution to integrate with a range of other backend systems

## Weaknesses

- Job pricing features aren't as granular as other leading accounting/print management platforms

- Device management features are not as robust as other leading platforms

- Enacting job rerouting and user behavior modification features may require writing or tweaking scripts

- Does not offer scan capture/processing/routing features as found on a few leading platforms

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# Product Profile

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| **Versions** | PaperCut MF is the full-featured version of the company's output management platform, with support for tracking print, copy, scan and fax activity. For organizations that wish to track print output only, the company offers PaperCut NG. |
| **Pricing** | The solution's price is based on user licenses plus MFP licenses for the embedded app. The Education license costs U.S. $700 (and supports up to 500 users); the Business license costs $592 (up to 25 users); and the Professional Client Billing license costs $850 (up to 25 users). MFP licenses cost $210 to $370. |
| **Users** | Maximum number of users supported: Unlimited |
| **Server** | 1-GHz CPU; 1-GB RAM; 300-MB hard drive space; Microsoft Windows Server 2003, Vista, Server 2008, 7, 8, Server 2012; Mac OS X 10.8 or later; Novell Open Enterprise Server 2 (SP1 or later); most modern Linux distributions including Red Hat, Novell SUSE, Debian; UNIX |
| **Client** | 500-MHz CPU; 256-MB RAM; no hard disk space required for zero install deployment (recommended), or 100-MB for local install; Microsoft Windows XP or later; Mac OS X 10.6 or later; most modern Linux distributions; other systems supporting Java 6.0 |
| **Compatible Hardware** | The solution can track print output sent to any networked output device and any local device connected to a networked PC. PaperCut offers embedded apps, which enable the tracking of walk-up copying/scanning/faxing and the release of secure print jobs, to devices equipped with the embedded software platforms from Brother, Canon (in the U.K.), Dell, Fuji Xerox, HP, Konica Minolta, KYOCERA, Lexmark, OKI, Olivetti, Ricoh (all brands), Samsung, Sharp, Toshiba, Triumph Adler, UTAX, and Xerox. Other devices are supported via an optional external terminal |
| **Software Integration** | In addition to LDAP and Active Directory integration, PaperCut MF integrates with 12 online payment services including PayPal, Authorize.Net, Blackboard, CBORD, Cardsmith, Cybersource, Heartland and Touchnet. An open API enables custom integration with other backend applications, and export and input options such as CSV are available to assist with input/export with third-party accounting applications. |
| **Mobile Compatibility** | The company offers a native mobile print app for Apple iOS devices; printing from other mobile devices is supported through Google Cloud Print, email-to-print, and printing from any modern browser on the device. |
| **Availability** | The solution is sold worldwide by authorized partner resellers. (PaperCut NG can also be downloaded and purchased directly from the company's website.) |
| **Languages** | English, French, Italian, German, Spanish, Brazilian Portuguese, Catalan, Chinese (Simplified and Traditional), Croatian, Czech, Danish, Dutch, Finnish, Hebrew, Hungarian, Japanese, Korean, Lithuanian, Norwegian, Polish, Portuguese, Russian, Serbian, Slovak (note that some translations were performed by PaperCut resellers in a given region, not by PaperCut's own developers) |

# Features & Productivity

PaperCut MF has a robust feature set that delivers most of the functionality that the vast majority of customers will need.

PRINT, COPY, SCAN AND FAX USAGE TRACKING

PAGE-LEVEL COLOR DETECTION

USAGE BILLING (BY USER, DEPARTMENT AND CLIENT/PROJECT)

USAGE QUOTAS

ACCOUNT REPLENISHMENT

RULES-BASED PRINTING

SECURE PULL PRINTING

MOBILE PRINTING

CUSTOMIZABLE REPORTING OF USAGE AND COSTS

## USAGE/COST ACCOUNTING AND RECOVERY

PaperCut MF delivers the ability to track print, copy, scan and fax pages executed at registered printers and MFPs to give organizations a clear picture of usage and its associated costs—and to recover costs when appropriate.

- PaperCut will track whether jobs are simplex/duplex and color/black-and-white; unlike some systems, PaperCut supports "page-level" color detection, where color and monochrome pages mixed into a single job are counted accurately.

- All usage can be tracked by user, department, client or project. This gives organizations the opportunity to track (and report on) who is generating the most in terms of hardcopy output, with an eye towards reducing such usage or recouping costs where appropriate.

- For organizations that plan on charging user, department, client or project budgets/accounts for output, the program allows an administrator to set different prices for color and monochrome jobs. Large-format output can be charged by the square foot/meter.

- Unlike most other systems BLI has tested, PaperCut MF allows a blanket discount (or surcharge) for certain accounts or sub-accounts, such as a 10 percent discount or a 5-cent per-page surcharge.

- On MFPs with an embedded applet, PaperCut MF allows an administrator to set one price for the initial page of a fax or scan job and a different price for subsequent pages, which is flexibility BLI has not seen in most other platforms.

- PaperCut MF also offers a Charge Rates feature that can be used to apply a percentage discount for a job (for example, a 50 percent discount for the second printout of a document) or a percentage upcharge (50 percent increase for special material, for example). This flexibility enables organizations to tailor charges to particular client accounts or situations.

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- End users can be required to enter a billing code for all tracked usage, so accounts can be accurately charged.

- PaperCut MF offers a Shared Accounts feature, so multiple users can charge output to a given account (such as a particular client or project). The system also supports sub-accounts, so a particular client can have different projects being tracked and billed simultaneously.

- The accounting data collected and calculated by PaperCut MF can then be used to deduct funds from internal user/department accounts, or to generate bills for external clients. This enables organizations to accurately charge internal cost centers for device usage, or to recoup output costs from external clients.

- While PaperCut MF's job-accounting features cover what a typical organization might need and then some, BLI technicians found that pre-built pricing options are not as granular as found in some competing platforms. For example, some allow an administrator to apply several per-page price tiers as the size of a document hits various thresholds, and to charge for things like rush or weekend jobs. PaperCut allows for such advanced pricing schemes, but they require custom scripting to accomplish.

PaperCut allows administrators to set per-page pricing for jobs, which is then billed against a user or client account.

## COST REDUCTION

PaperCut MF empowers organizations not only to track and recoup output costs, but to avoid costs when possible in the first place.

- PaperCut MF helps reduce overall output expenditures through the enforcement of usage quotas. Administrators can set a total budget for a user or department, and disallow jobs once a quota is reached or perform other actions (such as allowing the job but alerting the user that the quota was reached). Before a quota is reached, the system can be set to send a message to the user that funds are low.

- The system can also be set to automatically add credit to an account when it hits a set threshold, or to add credit in a specified time increment (such as to add $10 weekly). The administrator can set an account-accumulation limit, so an account balance does not go above a certain ceiling.

- The solution's Filters & Restrictions feature lets an administrator force actions such as converting color jobs to monochrome, switching simplex jobs to duplex, denying a job based on a set cost threshold, denying because it is a duplicate of a document recently printed, restrict printing by application type, discourage the printing of multi-page email messages and more possibilities with custom scripting. This feature can greatly reduce wasteful or unnecessary printing, which saves money and also helps an organization satisfy "green" initiatives.

- With scripting, PaperCut MF offers the ability to re-route jobs to more cost-effective devices; for example to route a job from an office ink jet printer with a high cost per page to a shared laser MFP with a lower cost per page.

- Administrators can also enact "behavior modification" features, whereby an end user will receive a message prompting them to consider more cost-efficient or eco-friendly print settings.

- Unlike with some platforms, job-conversion functionality is tied to a particular device (the Filters & Restriction filter is accessible after selecting a device from the Printers tab), not globally for any print job.

- PaperCut provides walkup users at the MFP with most of the same set of application features provided in the print control area. Users access the controls through secure log in at the device through a swipe card or keypad. Once authenticated, users can complete copy jobs (if their quotas allow) and enter billing codes for allocation of costs to accounts/departments/cost-centers/projects.

- While PaperCut MF allows administrators to set charges for scan and fax functions, there is no provision to restrict these functions except to deny the scan/fax if the user is out of credit or to globally restrict access to the device based on user Groups. Also, while copying access can be restricted by user/group, the ability to restrict color copying (as opposed to any copying) is supported only on some devices. And note that, as with most (but not all) other output management platforms, the job-conversion features (to force color jobs to print in grayscale or simplex jobs to print in duplex, for example) do not extend to copy jobs.

Rules-based printing enables administrators to disallow, convert or re-route jobs to reduce printing costs.

## MOBILE AND GUEST PRINTING

In addition to usage accounting and cost reduction, PaperCut MF can be used as a company's mobile print platform

• The bundle includes a web application for Apple iOS devices (iPad, iPhone, iPod Touch) that enables the printing of documents from those mobile devices.

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- PaperCut MF offers integration with Google Cloud Print, Google's web-based cloud service that manages the delivery of print jobs from an application to a printer. And since print traffic goes through the monitored print server, all Google Cloud Print printing is tracked and controlled, and users can leverage features such as secure pull printing.

- Web Print allows users to output files by uploading them from a browser with no client software or driver installation required.

- The solution also delivers Email to Print, which provides a simple, straightforward printing option for any mobile device with email. Email to Print allows users to print images, PDFs and Microsoft Office documents.

- PaperCut MF offers simplified guest printing in an organization, a feature that lets visitors print from their mobile device without setting up an account or accessing the organization's private Wi-Fi network. This adds convenience for visitors and clients while relieving IT staff of the chore of providing access for each guest.

## OTHER FEATURES

PaperCut MF delivers a number of other convenient features

- The platform's "Find-Me" secure pull printing features enhance document security and user convenience by allowing a user to submit a print job and then release it at any registered printer. This way, sensitive documents are not left in the output tray for others to see. The feature also helps reduce costs, since jobs that are not retrieved are never printed in the first place.

- PaperCut MF offers full reporting for devices and usage. There are 80+ standard one-click reports available, and more advanced reports can be generated through ad-hoc customization of filters and other report settings.

    **User:** runs reports on document output activity by user

    **Printer:** generates information on documented output activity by printer

    **Print Log:** allows administrators to list all jobs over a given date range

    **Group:** allows administrators to gauge output by group

    **Shared Accounts:** shows shared account usage and prints account invoices

    **Transaction:** shows a summary of transactions and balance adjustments

    **Environmental Impact:** summarizes the environmental impact of print jobs

    **Ratio:** summarizes relative printing costs between users, groups or devices

- The Central Reports feature is useful in environments where PaperCut is installed across multiple locations/servers, since it can be configured to generate aggregate data from multiple, application servers/sites.

- Administrators can choose to export reports in PDF, HTML or CSV (for use in Excel and other programs) format. Custom logos and text can also be added to the header of all standard reports.

- PaperCut's included Site Server component delivers redundancy and resilience in multi-site deployments or private-cloud setups, enabling secure print release/Find-Me printing even in the event of a network outage.

## Usability

Users interact with PaperCut MF both at the desktop and on MFPs equipped with the embedded application.

- End users will typically interact with PaperCut MF through a browser. This means they can access their account from any computer, anytime.

- The interface is clean and intuitive, and with its simple tab organization is a breeze to navigate. Users have a set of web tools that are well organized and immediately familiar, similar in feel to an online banking site; therefore, no training is necessary. These tools enable users to track their own activity in real-time, check account balances, add credit, and even view their environmental impact.

- PaperCut MF also supports username, PIN code and card-swipe authentication for users at walk-up devices, and it can be configured to require a card plus a PIN or user ID plus a PIN to authenticate. It offers clear explanations prompting users to log in to access copier functions and reminding them to log out when finished (the administrator can set a default log-out period).

- The administrator can prompt the user whether to charge to a personal account or a shared account (such as a particular department) and users at the MFP can search for a shared account. Importantly, when adding annotations and other markups, all such elements are captured as an overlay and stored separately.

- When an account balance is low, users receive a pop-up when they send a print job, with the amount left in their account. To replenish, users need only to transfer funds, again, similar to online banking.

- The client applet offers users an Environmental Impact Dashboard to illustrate the impact a user's print usage is having on the environment and to compare that usage with the company average.

# IT Administration & Security

## Installation / Configuration

- PaperCut MF is installed and configured by a trained reseller (often via a remote session), who then trains the administrator on the system's use. To assist with the common, yet all-important, task of project management and print policy changes associated with deployment, the developer offers a detailed step-by-step implementation guide that helps administrators properly lay the groundwork.

- The solution is typically installed on a server and tracks local print queues and the network domain/directory environment for user authentication. All existing print queues on the network are automatically detected during installation At no additional cost, secondary servers can be installed on local PCs and/or additional print servers to track local print queues and any direct IP/USB printing.

- PaperCut MF can be deployed on a server running any one of the supported network operating systems: Microsoft Windows Server 2003, Vista, Server 2008, 7, 8, Server 2012; Mac OS X 10.8 or later; Novell Open Enterprise Server 2 (SP1 or later); most modern Linux distributions including Red Hat, Novell SUSE, Debian; UNIX. This is the widest NOS support BLI has seen in any output management platform.

- Thanks to integration with Active Directory, LDAP and the directory services of a range of network operating systems, adding users to the system is practically automatic. PaperCut MF extracts user information out of the System or Domain, with the options presented varying depending on the operating system.

- Because PaperCut MF tracks printing on the server by interfacing with network queues, client-PC software isn't required for silent tracking and accounting in an authenticated network, so there's no need to push out packages or manage future updates.

The handy Dashboard home screen shows a range of pertinent usage and system information.

### Ongoing Administration

- One of PaperCut's greatest advantages is how easy it is for IT staff to administer. The logically arranged menu items and handy Dashboard make it approachable even for those who have never used a print management system.

- The home-page Dashboard provides an overview of all system activity and the current status of all network devices and users. For example, the System Status box provides statistics such as the number of users and printers, recent errors and warnings, total pages printed and more. There's also a chart showing the number of pages printed per day over the past 30 days, and a "What's Next?" box that suggests actions to be taken.

- The handy Environmental Impact box on the Dashboard shows the positive impact the organization has had on the environment since installing PaperCut, expressed in the number of trees saved and the amount of carbon emissions avoided.

- Navigating through the solution's features is intuitive and familiar thanks to its use of well-labeled tabs on the home page. Other UI conventions are also extremely helpful, such as a context-sensitive Actions box on each page that surfaces tasks and settings the administrator is likely to be looking for, and a hyperlinked "breadcrumb" trail at the top of the page that shows the administrator where he has drilled down into (for example, "Users > User List > Details") and lets him jump back to a higher-level page by clicking on the desired entry in the trail.

- The system supports a Global Print Driver for more easily implementing universal and Find-Me print queues into a mixed-fleet environment, since one driver can be used on a single global virtual queue to enable printing across multiple models and brands.

- PaperCut MF also supports automatic user ID number generation, so users can self-register and generate their own login IDs in environments that require them to log into copiers or release stations. This greatly reduces the administration overhead for IT personnel.

- PaperCut supports reporting on device error conditions—including paper jam, paper out, cover open, low toner, toner out, and others—so IT personnel can quickly resolve such problems and keep printers operational.

- Most of PaperCut MF's job-conversion and re-routing features rely on scripting; while code "recipes" (prebuilt code templates) are included for many such functions, some customization will be required. With some competing platforms, setting up rules-based print behaviors is wizard-driven rather than requiring scripting.
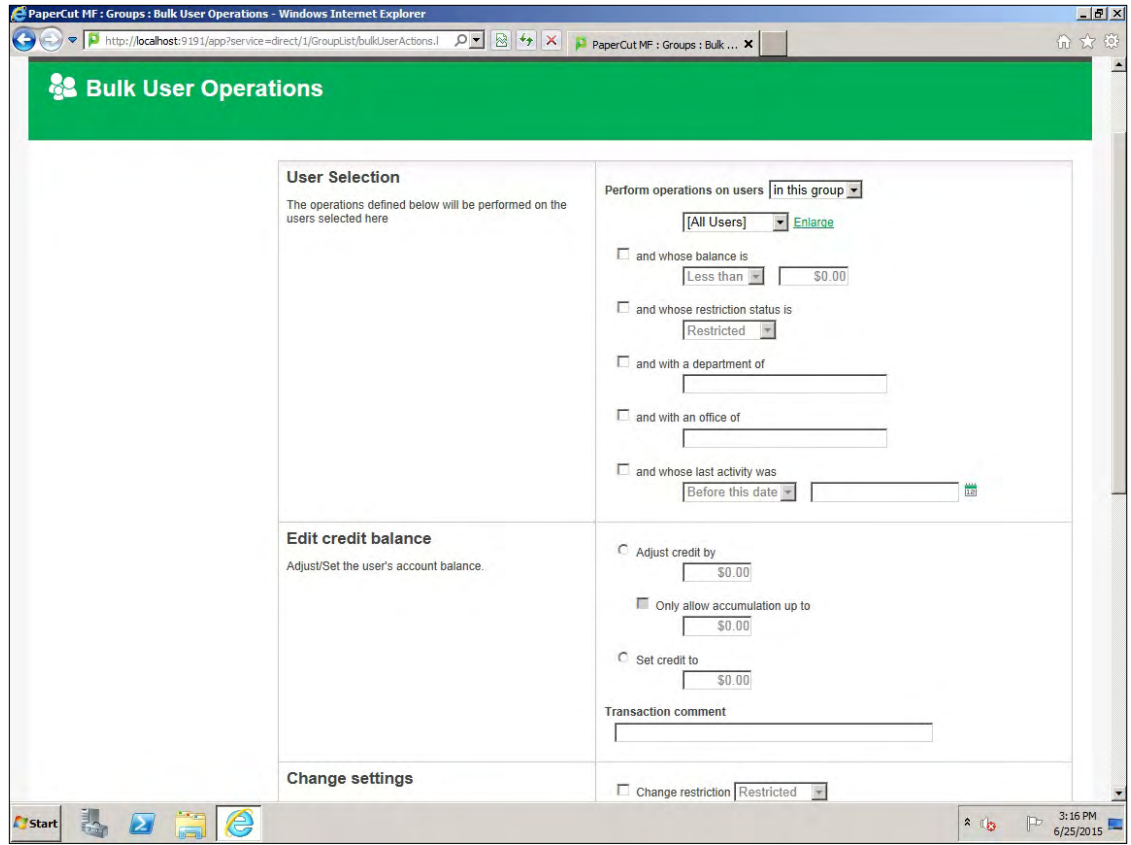
Administrators can make changes globally to selected groups, users or accounts to streamline chores such as adding credit to balances.

## Security

PaperCut delivers a good set of security-oriented features.

- The solution uses SSL for communication (administrators can require SSL when accessing the system from mobile devices) and remote web-based administration, ensuring sensitive data like passwords and account information is locked down over the network

- In addition to integrating with leading directory services for user authentication (Active Directory, LDAP, Open Directory, eDirectory, NIS, PAM, Samba), the solution supports card authentication (Magnetic Stripe, HID, Mifare and others)

- The Find-Me printing feature enables secure release, which can ensure that documents are only seen at the device by those who are authorized to do so.

- For an added level of security, watermarking and digital signatures are included. Dynamically constructed text (such as a user's name and a date) can be added to the page as a watermark. This is a feature not seen in most competing platforms.

- Digital signatures can be used to verify the origin and author of any print job.

- Print Archiving, which allows administrators to view printed jobs via the interface, tightens security and audit policies.

- The platform's Audit Logging feature tracks changes to users and settings within PaperCut. Audit details include who made the change, what attribute was changed as well as the previous and updated values

- PaperCut offers username and document name hiding for jobs in the Windows print queue, and this feature can now be configured for specific queues via the admin Interface.

- User PINs are stored in the PaperCut database in encrypted form.

# Support & Training

While installation and initial configuration are handled by the reseller placing the system, ongoing support is provided from PaperCut's offices in Australia, the UK and North America.

- With every new license purchased, the developer includes all minor point-version upgrades and email and phone support. Premium Upgrade Assurance is priced at 20 percent of total cost per year, with discounts available when multiple years are purchased.

- All upgrades, fixes, and 24/7 remote phone, live chat and email support are covered under the maintenance agreement.

- BLI called technical support at various times of the day over a week and received a representative in less than a minute in each instance.

- A wealth of information and documentation includes an in-depth, yet easily-digestible, 500+ page hyperlinked user guide that can be accessed online or downloaded along with embedded application videos on the PaperCut YouTube channel.

- The developer offers a searchable knowledge base with hundreds of articles, too. All manuals have numerous screenshots and easy to follow instructions and explanations. In addition, users can post questions and receive answers from a blog along with a discussion list that's linked to each page of the User's Guide and Knowledge Base.

# Value

Compared with the competition, PaperCut MF is a feature-rich solution that's well priced. The solution is priced based on user licenses plus MFP licenses for the embedded app. The Education license costs U.S. $700 (and supports up to 500 users); the Business license costs $592 (up to 25 users); and the Professional Client Billing license costs $850 (up to 25 users). MFP license cost $210 to $370 each. A typical commercial deployment for 50 users and three MFPs, with support for unlimited servers and printers and 12 months of included support, is priced at $2,188.

- In addition, because it's easy to administer, it requires less of an investment in IT overhead and training.

- PaperCut offers two ROI calculators on its website, one for education customers and another for businesses (www.papercut.com/tools/roi/). Potential clients can plug in a few data points to quickly call up an estimate (more extensive calculators are available for resellers). According to the developer, many of its customers have reported that the software has paid for itself in less than 6 months.

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