

Financial IT Departments:

Increase Security and Simplify Printing with PrinterLogic



PrinterLogic

Business Problem

Banks and credit unions hold the vital trust of protecting their clients' assets. This trust goes beyond protecting money and information from an outside breach; it also includes securing these goods from inside perpetration. Financial organizations go to great lengths to ensure their clients' assets, and their reputation, stay intact. These include complying with strict federal and state regulations in regards to security and which employees see what information.

IT departments need to meet all of these regulations while still cutting costs and improving operational efficiencies in a technology-driven industry. Although banks and credit unions rely on technology, they still have a paper-driven process and require a stable printing environment. Clients want access to their money whether the printer is working or not. The financial industry poses unique printing problems for IT professionals.

Print servers in branches and data centers

Printing is essential in financial organizations, and print servers are the tools that IT departments rely on to maintain a stable print environment. But when print servers crash, employee productivity is interrupted, which in turn impacts the customer. Print servers also require additional management, create risk through a single point of failure, complicate deployment, consume IT resources, and drive up costs. Banks and credit unions may keep print servers at each branch to decrease print-related problems, but this model exponentially increases hardware for IT to buy and manage. Plus, more data is outside the data center, creating a possible security hazard. Banks and credit unions may prefer to host print servers in data centers. This model increases wide area network (WAN) traffic for print jobs, and more branches are affected when the print server crashes or the WAN connection goes down. Financial organizations need stable print services without installing print servers in branch offices or pinging a print server in the data center over a slow WAN connection.

“Eliminating print servers is one of those things every IT person wants to do, but you just never realize it is a possibility. PrinterLogic not only simplified our entire print environment, it also fortified an essential function of our business by eliminating printer downtime.”

—Matt Duso, IT Specialist, CFCU Community Credit Union

VDI print workflows

A virtual desktop infrastructure (VDI) is popular with banks and credit unions because employees can access information with a consistent workspace from nearly anywhere and from nearly any device, while keeping critical data secure in the data center. A financial organization's mobile workforce—from tellers, loan officers, and branch managers who use different workstations—further drives the need of VDI.

However, VDI routinely falls short when deploying print jobs: getting jobs from the Citrix or VMware server to the print server and then to the end user's network printer requires extensive scripting and group policy objects (GPOs). When you add hundreds of printers and even thousands of users into the mix and spread them over numerous locations and servers, you invariably end up with chronic printing and deployment issues.

Security and compliance around print management

Printers are among the most widely used devices in any organization and present extensive security risk. For example, abandoned print jobs at a bank or credit union could harm a client or reveal other confidential information. Preventing scenarios like this are why financial organizations are required to track everything that happens with printers, complying with the Sarbanes-Oxley (SOX) Act and other regulations. IT departments must create an audit trail to account for the who, what, where, and why of each printer—from printed documents, to IT processing activities, and much more. Gathering all printer-related information is a considerable task.

PrinterLogic Solves Print Management for Financial Organizations

Complex print environments aren't necessary. Complexity increases the possibility of error, which can compromise security. Simplicity is the key to security. PrinterLogic simplifies print environments by eliminating all print servers, converting your environment to centrally managed direct IP printing, and providing a web-based Admin Console. Through an unobtrusive end-user client, print jobs are sent from an end user's device directly to the network printer, bypassing problematic print servers. This capability simplifies the continual challenge of managing print needs at numerous branches as well as expansion headaches. PrinterLogic goes beyond eliminating print servers and offers the following print management benefits:

- Printer driver management and deployment without scripting and GPOs
- Citrix and VMware support to simplify printing in virtual environments
- Self-Service Installation Portal to reduce help desk calls and empower the end user
- Print job auditing and reporting to discover printing activities, costs, and waste
- Pull printing to increase security of print jobs

Once print servers are eliminated, VDI really shines. End users experience both a consistent desktop and print experience. PrinterLogic enables Citrix and VMware organizations to eliminate complex printer deployment scripts and GPOs that map print jobs from the virtual instances in the data center back to the end user's network printer. These methods are replaced by the PrinterLogic Client and the automatic printer deployment assignments created in PrinterLogic Web Stack (formerly Printer Installer). This unique combination gives admins full control over printer driver assignments, which can utilize either native printer drivers or a universal print driver.

PrinterLogic secures printers and provides tools to remain SOX compliant. Printer security and compliance are increased through secure pull printing. Rather than immediately putting the document in the printing queue, secure pull printing requires end users to be physically present at the printer and uses one of several authentication methods to validate that they are the person who submitted the print job. Successful validation releases the print job for printing. Secure pull printing ensures the right person receives the document, eliminating the “print and sprint” approach—hoping you get to the printer before someone else does.

“We were surprised to find that we could not only replace the functionality, but also gain new functionality, by completely eliminating our print servers.”

—Marc Forester, Technical Services Manager, BankPlus

PrinterLogic also comes equipped with print audit features. Using the Admin Console, administrators can track all print details for each printer, providing an essential audit trail and employee accountability.

Simplifying Print Management

PrinterLogic simplifies print management for financial organizations by eliminating print servers in branches and data centers, creating a smooth VDI print experience, and providing auditing reports and improved print security.

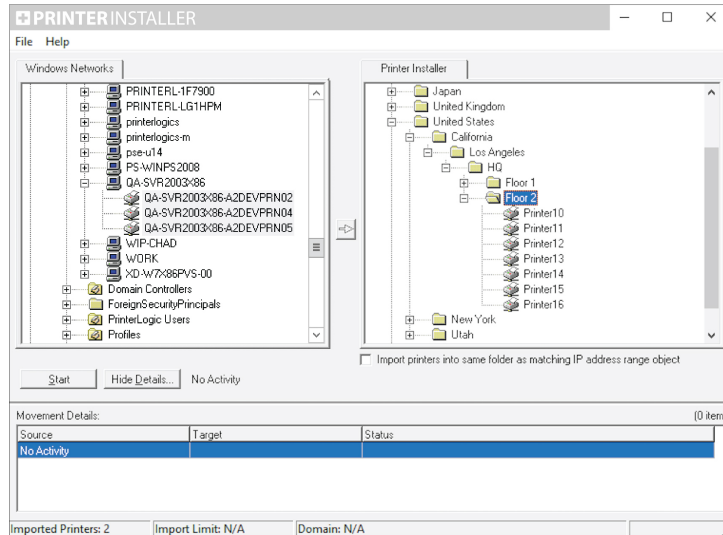
Eliminating Print Servers in Branches and Data Centers

PrinterLogic Web Stack simplifies print management in data centers and at multiple branches for Windows, MAC, and Linux operating systems. The solution allows IT to eliminate print servers at every location. A web-based Admin Console lets you configure printer drivers, define deployment rules, and solve the complexity of getting the right driver to the right workstation without complicated scripting and GPOs—all from a single interface.

PrinterLogic Web Stack makes it easy to convert your environment to centrally-managed direct IP printing so you no longer need print servers in your data center or branch offices. Here's how:

Step 1: Import information from print servers

After you install PrinterLogic Web Stack in your data center, use the Admin Console to run the import tool. This tool imports printer objects and associated drivers from existing print servers. During the import process, all of your existing printer drivers, port settings, device settings, and preferences are copied from your print servers into PrinterLogic Web Stack without changes.



PrinterLogic Web Stack Import Tool

Step 2: Push out the PrinterLogic Client

You can push out the PrinterLogic Client silently to end-user workstations using any software distribution tool you prefer. Once in place, the client installs printer drivers, configures printers, and collects print job data without having to elevate permissions. It also silently converts all existing printers that were connected to print servers into centrally managed direct IP printers. The default printer and customized printer settings—including name, comments, location, and printer drivers—remain intact through the conversion.

Step 3: Deploy printer drivers to end users

PrinterLogic Web Stack deploys printer drivers using either auto deployment or the Self-Service Installation Portal. Auto deployment is a push installation using the PrinterLogic Client. In the Admin Console, you can deploy printer drivers using Active Directory (user, computer, group, container, or OU), IP address range, hostname, MAC address, or a combination of these called Advanced Groups.

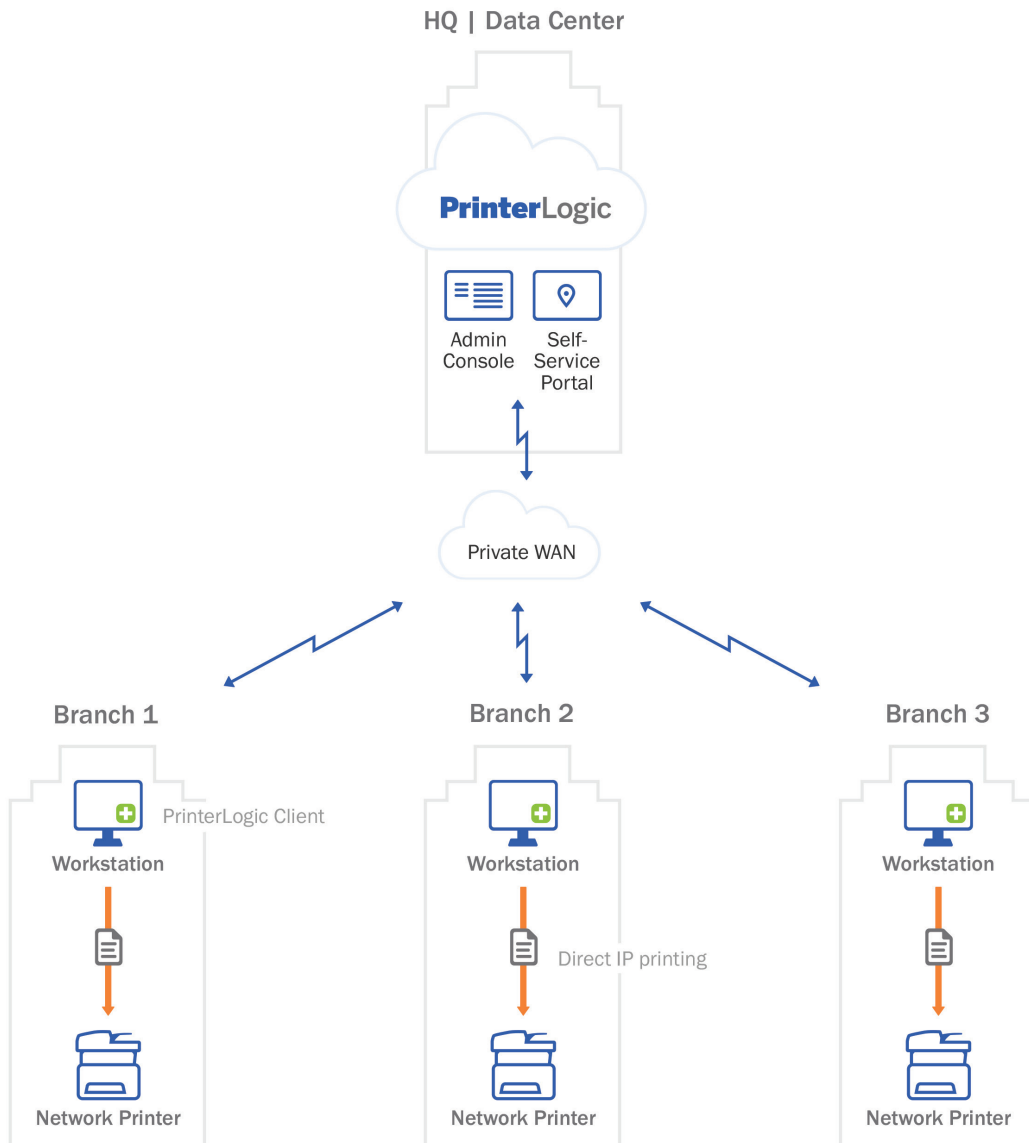
The Self-Service Portal uses a pull installation and enables employees to install a printer on their own—with a single click—without help desk intervention. The portal also assists those who simply want to install an additional printer or a different one from what was originally installed through an auto deployment. End users can effortlessly identify nearby printers using a customizable floorplan map and intuitively add a printer. Admins can also define security parameters. For example, if your organization has a specialty printer that should not be widely installed, you can hide that printer from the Self-Service Portal using the Security tab.

For more information on printer driver deployment and the Self-Service Portal, please read the following white paper: [Printer and Driver Management](#).

Results

Print servers are completely eliminated, even at branch locations, and print jobs aren't sent over slow WAN connections. Now when end users print, their print job is sent direct IP to the network printer—no Internet connection required and the print job remains on the local network segment.

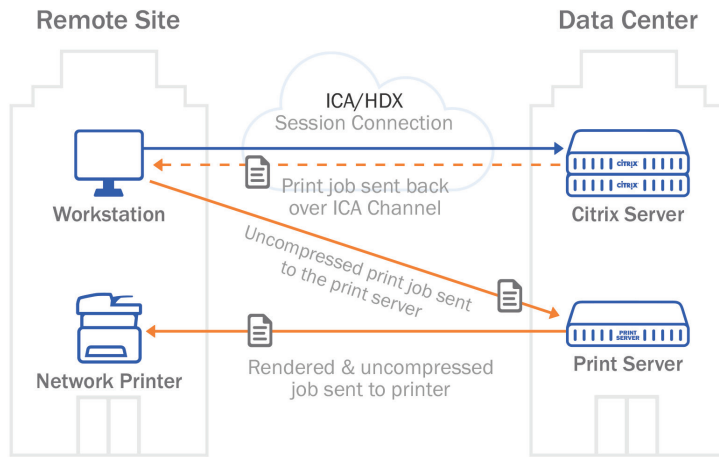
Going forward, the printing details are centrally managed through PrinterLogic Web Stack. IT can use the Admin Console to add new printers, update printer drivers, or simply rename a printer without complex scripting, GPOs, or slowing down employees and clients during business hours. What used to take hours will take only minutes.



PrinterLogic Converts Your Environment to Centrally Managed Direct IP Printing

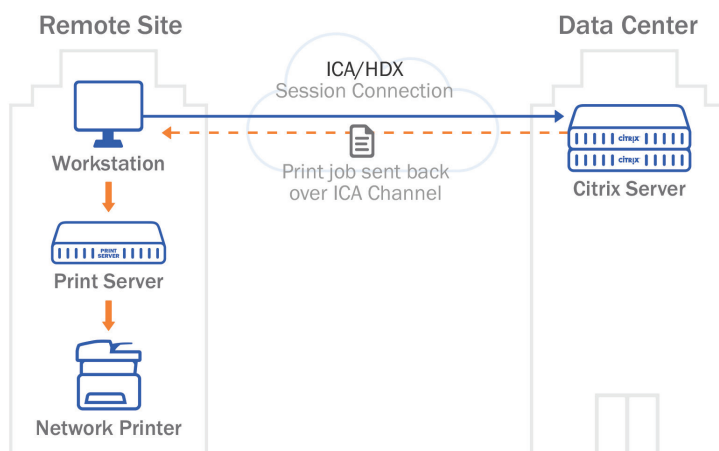
Creating a Smooth VDI Print Experience

VDI print management is complicated. The printing process varies depending on whether print servers are centralized in the data center or distributed throughout branches and whether you use auto-created or session printers. Either way, the print job is sent from the end user's workstation over the independent computing architecture (ICA), HDX, or PCoIP channel to reach the Citrix or VMware server. From there, IT uses scripts, GPOs, and vendor policies to ensure print jobs make it from the virtual world back to the end user's network printer. The end result is increased WAN traffic, complicated and unreliable script and GPO mapping, and an influx of help desk calls, to name a few.



Common VDI Print Scenario—without PrinterLogic

PrinterLogic Web Stack addresses the many issues related to VDI printing by converting printers to centrally managed direct IP printing, thereby eliminating print servers, streamlining infrastructure, increasing print reliability, and reducing WAN traffic.



VDI Print Scenario—with PrinterLogic

When end users connect to a VDI session, the PrinterLogic Client can either be installed on the Citrix host server or the fat/thin client. If the PrinterLogic Client is installed on the Citrix/VMware server, it automatically detects who they are and where they are connecting from and instantly delivers any printers that have been deployed to them without using a universal driver. The PrinterLogic Client determines the physical location of the fat/thin client from within the session, so printers that are closest to the workstation, not the data center, are detected with location-aware printing.

If the PrinterLogic Client is installed on the fat/thin client, the printer is installed on the workstation and uses redirected printers created in the Citrix/VMware session. In this scenario, you get the advantages of print job compression through the ICA or PCoIP channel and print jobs are sent directly to the printer without using an unreliable printer spool in the middle.

If end users are transient workers or simply need to install a new printer, they can use the Self-Service Installation Portal to identify and install printers themselves whether they have the PrinterLogic Client installed on the workstation or in-session. Regardless of how the printer was deployed, it remains with end users anytime they connect.

End users will appreciate that their VDI session won't interfere with their ability to print. And because PrinterLogic Web Stack cuts the number of trips across the WAN, print jobs are executed more quickly, reliably, and securely. From the backend, admins will find that printer deployment is more straightforward, dependable, and flexible because of the Admin Console and its ability to deliver targeted deployments through AD criteria without the need for GPOs and scripts.

This unique combination of increased manageability and end-user empowerment ultimately leads to fewer print-related tickets and emergencies for help desk and other IT support staff. Long-term cost savings are a natural part of this reduced demand on time and effort.

For more information on VDI printing, please read the following white paper: [How to Simplify Citrix Printing](#).

“All print jobs are streamed over an optimized Citrix network connection and then printed from the computer directly to the printer, versus printing from a print server in our data center over the WAN to the location's local printers. We have zero servers in our branches, so we have less server hardware to support and maintain.”

—Mike Currie, Senior Vice President and IT Infrastructure Manager, Banner Bank

Providing Printer Security and Compliance

PrinterLogic Web Stack keeps your printing environment secure and provides reports that establish SOX compliance for every printer in your organization. Here's how:

- **Secure pull printing:** Requires end users to be present at a printer to print their content and uses one of several authentication options to validate ownership of the print job.
- **Administrative audit records:** Tracks administrative changes to printer settings.
- **User-level audit records:** Monitors all the different print jobs from every employee.
- **Role-based access control:** Allows administrators to restrict who accesses what information.
- **SNMP v3 monitoring:** Provides secure connections to collect reporting data regarding the current status of a printer.

Printers introduce *considerable* security risk. On average, an employee prints 34 pages a day with one page in every seven never being retrieved from the printer.¹ Every department in a financial organization has information that is considered sensitive and should never be left at the printer for anyone to view. Secure pull printing is particularly useful because it establishes nonrepudiation—who printed as well as what, when, and where they printed. Plus, print jobs are sent to a specific printer, requiring the end user to release the job at only that printer. Secure pull printing provides heightened control over where documents should be printed.

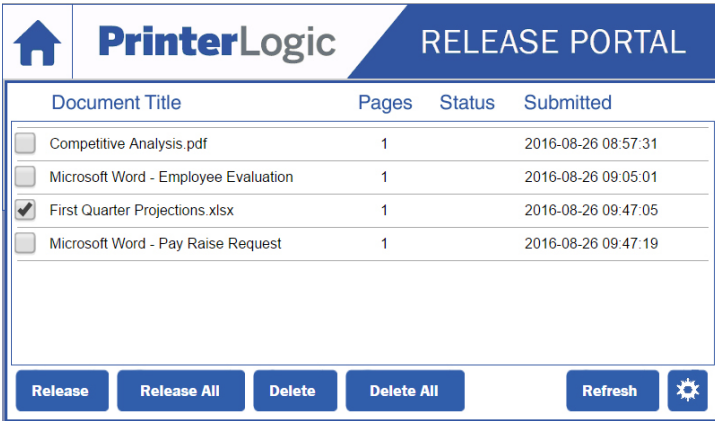
When setting up secure pull printing, IT admins leverage their existing security practices and tools, such as Active Directory. PrinterLogic only adds layers to existing security practices rather than adding new security procedures.

Administrators have the following options for how end users release a print job:

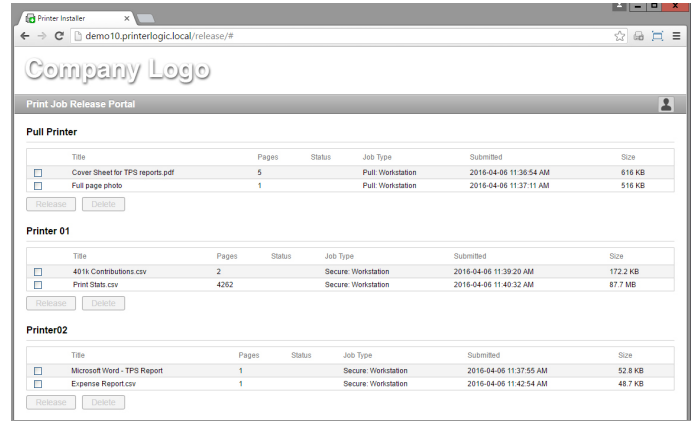
- **Badge and card-reading devices.** Registering an existing badge with the badge/card release feature of PrinterLogic simplifies the process of releasing a print job. End users simply swipe their badge or card to access the release portal. This reader might be built into the printer or connected to the printer through a USB.
- **PrinterLogic's embedded control panel release.** This option uses the integrated LCD control panel on the printer to authenticate the end user, but without a badge or card reader. This feature supports many of the most popular brands and models.

¹ "Do your printed documents feel abandoned and unclaimed? Help is here", LinkedIn.com. September 15, 2015, <http://www.linkedin.com/pulse/do-your-printed-documents-feel-abandoned-unclaimed-help-garry-dockree>

- **Browser-based release.** With this option, end users log into a browser (for example, http://printers.yourdomain.com/release). Then, they release a document by selecting the checkbox next to the document they want to release and click “Release.” This is a great option if the IT administrator would like to setup a release “station” with a device next to the printer.



Badge/Card Release Portal



Browser-based Release Portal

For more information on pull printing, please read the following white paper: [Pull Printing: Reduced Waste. Greater Flexibility. Increased Security.](#)

Conclusion

With PrinterLogic, banks and credit unions can increase print security while also complying with regulations and simplifying print management. PrinterLogic allows IT admins to:

- Simplify all print management by eliminating print servers and converting your environment to centrally managed direct IP printing.
- Establish a reliable VDI print experience by eliminating print servers, minimizing trips across the WAN, and introducing dependable printer deployments.
- Increase print security and accountability through secure pull printing and auditing reports.

Financial organizations can maintain a stable print environment and ensure their clients' assets remain confidential. That's good business.

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