

# **PrinterLogic Improves Printing in Meditech EMR Environments**



**PrinterLogic**

## Introduction

It's no secret that being able to print electronic medical records (EMRs) quickly and securely is core to effective patient care and the sanity of healthcare professionals. It's also well known that printing EMRs through systems such as Meditech is complex and confusing.

For example, Meditech printing requires the use of proprietary print server technology. In such instances, it's possible for organizations to have a print server for each type of healthcare function as well as location. And Meditech recommends having redundant servers in place to take care of high availability. The environment at OhioHealth, for instance, employs around 20 different print servers (for redundancy purposes) supporting 5,500 printers.

In such an environment, installing and managing printers on the Meditech print servers creates an IT management nightmare. Printers must be installed and configured on each print server and, when changes are made, each print server requires a touch. Keeping all the printers consistent across EMR print servers becomes a challenge and introduces human error into the equation.

PrinterLogic simplifies the management, migration, and provisioning of printers in an EMR environment by managing all the print queues for this critical application to eliminate human error and enable healthcare workers to pursue their core business of patient care.

This white paper shows how PrinterLogic simplifies the process of print management for healthcare organizations that employ the Meditech brand of leading EMR systems.

PrinterLogic Web Stack (formerly Printer Installer) manages EMR systems, but its core functionality eliminates Windows print servers. It replaces all the functionality that print servers once provided with centrally managed direct IP printing. What's more, PrinterLogic Web Stack adds many new features that simplify print management and provisioning, reduce costs, and empower users to install printers for themselves, reducing calls to the help desk.

**“We've gone from trying to control our printers hospital-wide to where I can do it at a single desktop. PrinterLogic has been amazing in that regard. We've fixed so many MEDITECH print problems with PrinterLogic.”**

**—Jessica Pennington, Server Admin, Princeton Community Hospital**

In addition to managing Meditech printing, PrinterLogic:

- Easily configures printing from VMware Horizon View and Citrix Virtual Apps and Virtual Desktops implementations
- Gains the simplicity of direct IP printing without losing control or security
- Follows healthcare professionals by installing printers based on user location
- Releases prints only when the end user authenticates at the printer
- Reduces print management costs, including infrastructure, support, and service desk costs
- Enables healthcare personnel to install their own printers
- Supports end-users regardless of device and location

## Solving Print Management in EMR

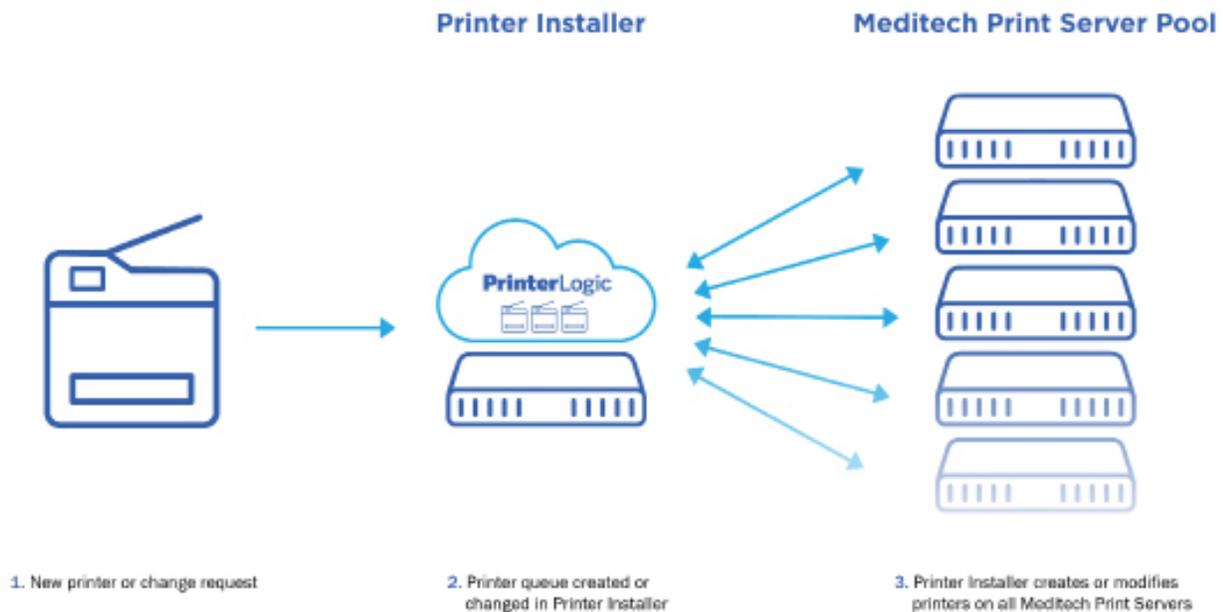
PrinterLogic's mantra is eliminate print servers! But when it comes to Meditech print servers, they are essential to the way the software sends print jobs and cannot be eliminated. However, they can be managed much more efficiently, and PrinterLogic comes to the rescue.

Now with PrinterLogic Web Stack, you gain central control of Meditech printers and changes. For example, when a new printer is acquired, you administer that printer queue through the PrinterLogic Web Stack admin console, and all necessary changes then replicate to every Meditech print server automatically. Printer queues can be created or modified on all associated print servers.

Now if a printer is changed, removed, or replaced, the IT administrator no longer must visit every Meditech print server. Instead, the administrator makes the change in the PrinterLogic Web Stack admin console and the change is replicated to all the Epic or Meditech print servers. This saves IT time and headache in keeping all the print servers for EMR the same, reducing human error.

**“For reasons we could never pinpoint, all our printers on our background servers would go offline. Amazingly, [PrinterLogic] corrected our problem. Our medical and administrative staff can continue to deliver first-rate customer service by focusing on patients rather than printers.”**

*—Jessica Pennington, Server Admin, Princeton Community Hospital*



# PrinterLogic Web Stack Solves EMR Print Server Management

PrinterLogic Web Stack makes it easy to manage printers for the entire Meditech environment from a single pane of glass. Let's take a minute to see how to set up and configure PrinterLogic Web Stack to manage print servers in your Meditech environment.

## Step 1: Setting up PrinterLogic Web Stack to manage printers for EMR.

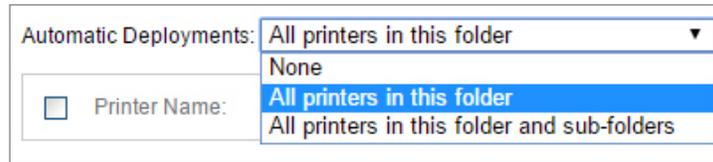
Once you have your instance of PrinterLogic Web Stack up and running, you create a Meditech folder within the Admin console. This folder must be labeled “\_Meditech” in PrinterLogic Web Stack to separate the management of EMR print servers from the other functions of PrinterLogic Web Stack.

The screenshot shows a configuration window with tabs for 'General', 'Security', 'Alerts', and 'Map'. The 'General' tab is active. It contains a 'Folder Name' field with the value '\_Epic' and a 'Hide from Portal' checkbox that is checked. 'Cancel' and 'Save' buttons are located in the top right corner.

Once the “\_Meditech” folder is created, you create an IP Address Range Object inside the folder. Specify the IP address range of your Meditech print servers. If necessary, create more than one IP Address Range Object to cover all your Meditech print servers.

The screenshot shows a configuration window with tabs for 'General', 'Deploy', and 'Administrative Security'. The 'General' tab is active. It contains an 'IP Address Range Name' field with the value 'Epic Print Server Range'. Below it is an 'IP Address Range' field with the value '192.168.3.61 to 192.168.3.64'. There is an optional 'Cache' section with a 'Cache Location' field, an 'Update cache files now' button, and two checked checkboxes: 'Redirect clients in this IP address range to obtain resources from the cache location instead of the Printer Installer server' and 'Synchronize data files to the specified cache location'. 'Cancel' and 'Save' buttons are in the top right corner.

Once the IP Address Range Object is created and you've specified the range of the Meditech print servers it will cover, go to the Deploy tab. With this automatic deployments drop-down option, set it to "All printers in this folder" and then hit "Save"

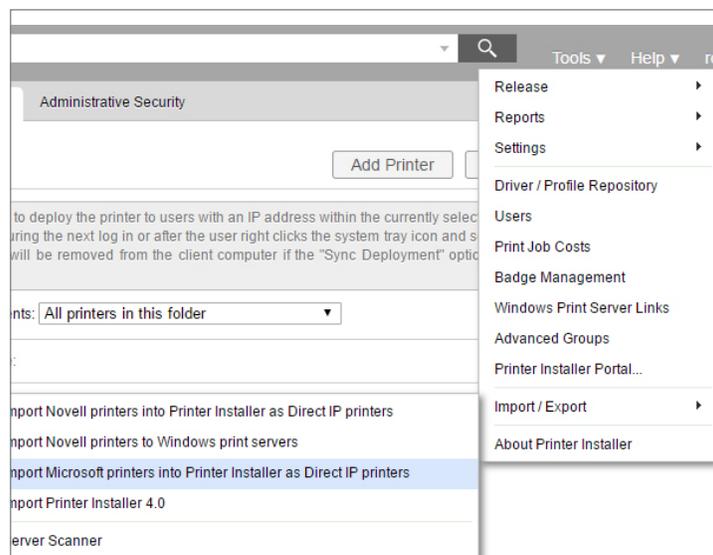


### Step 2: Install the PrinterLogic Web Stack Client onto each Meditech print server.

In order to manage Meditech print servers, you need to install the PrinterLogic Web Stack client on each server. You'll first need to either manually install or auto-deploy the client using systems management software. Having the client enables the interaction between PrinterLogic Web Stack and each EMR print server. Once the client is installed, you are managing Meditech print servers.

### Step 3: Defining EMR printers in PrinterLogic Web Stack.

With the "\_Epic" folder now created and the automated deployment option specified, use the Microsoft Printer Import tool to import all Epic print queues from one Epic server into the new folder. To do so, select Tools -> Import/Export -> Import Microsoft Print Servers Into PrinterLogic Web Stack as Direct IP Printers. PrinterLogic Web Stack will import all of the print queues from an Epic or Meditech print server specified by the IT administrator. At this point in the process, PrinterLogic Web Stack is only importing the printer queues and drivers and not modifying them in any way. Make sure to import all of the needed printers that will be synchronized across all of your Epic or Meditech print servers.



Once you have imported all of the printers from one or more of your EMR print servers, you are now ready to use PrinterLogic Web Stack to manage all of your Meditech print servers. To create a new printer, select “New -> TCP/IP Printer” from within the “\_Epic” folder. Specify the name, IP address, and printer drivers in the dialog displayed. Once this printer is set up in the admin console, it will be synchronized with every Epic or Meditech print server.

The screenshot shows a dialog box titled "Add TCP/IP Printer". It has the following fields and options:

- Printer Name:** Text box containing "EPS".
- Location:** Text box containing "Upper Floor".
- IP Address or Hostname:** Text box containing "10.10.10.10".
- Comment:** Text box containing "B&W, Color, Duplex".
- Make Pull Printer**

Below these fields are sections for selecting drivers:

- 32-bit drivers:**
  - Windows 7: Dropdown menu with "...", "Upload New Driver" button.
  - Windows 8/8.1/10: Dropdown menu with "...", "Upload New Driver" button.
  - Linux 32-bit: Dropdown menu with "...", "Upload New Driver" button.
- 64-bit drivers:**
  - Windows 7 & 2008R2: Dropdown menu with "HP Universal Printing PCL 6 (v5.4) (x64)", "Upload New Driver" button.
  - Windows 8/10/2012/2016: Dropdown menu with "HP Universal Printing PCL 6 (v5.4) (x64)", "Upload New Driver" button.
  - Mac OS X 10.9-10.12: Dropdown menu with "...", "Upload New Driver" button.
  - Linux 64-bit: Dropdown menu with "...", "Upload New Driver" button.
- Citrix drivers:**
  - Citrix: Dropdown menu with "...", "Upload New Driver" button.

At the bottom right of the dialog are "Add" and "Cancel" buttons.

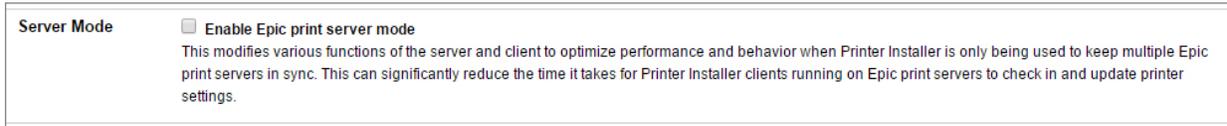
PrinterLogic Web Stack is now aware of every single network printer installed on all the Meditech print servers. Previously, when you needed to make a change to an existing printer or create a new printer, you would have to touch all the Meditech print servers. With PrinterLogic Web Stack you simply do it once in the admin console and the change is replicated across all those EMR print servers for you automatically

#### Step 4: Enabling EMR print server management in PrinterLogic Web Stack.

##### Option 1: EMR print server-only mode

Let's assume you use PrinterLogic Web Stack exclusively to manage Meditech print servers and do not plan on using it for printer and driver management for end user workstations. Once you have your client

installed and all of your printers imported into the folder, you'll find the Server Mode setting under Tools → Settings → General.



Checking the “Enable Epic print server mode” box optimizes the PrinterLogic Web Stack client. Because it performs fewer functions when it's running on the Meditech print server, it can check-in with the PrinterLogic Web Stack server faster and over a shorter period of time. When you add a printer to your “\_Epic” folder, it works quickly to synchronize that printer across all your Meditech print servers. If you change a driver for one of the printers in that folder, it can update that driver across your Meditech print servers more efficiently.

#### Option 2: Mixed mode

If you want to leverage the advantages of PrinterLogic Web Stack to manage both EMR printers and front-end Windows direct IP printers or end-user workstations, it's easily done. Rather than checking the “Enable Meditech print server mode box” (which would inevitably apply that server mode to even the front-end Windows printers), you simply change a Windows registry entry on each of your Meditech print servers.

To use mixed mode, add a new string value named “meditech” to the registry key *HKEY\_LOCAL\_MACHINE\SOFTWARE\PrinterLogic\PrinterInstaller\Overrides* and set it to '1' on each Meditech print server. This can be done manually on each instance of Windows server or through a script that you create.

So now the client on each Meditech print server is manually configured to run in that Meditech print server mode. All the other workstations you're managing run in standard mode and are configured through the PrinterLogic Web Stack admin console by the IT administrator.

## Conclusion

Efficient, reliable printing in today's EMR environments is essential to helping healthcare institutions deliver top-tier patient care. Print management solutions from PrinterLogic enable you to manage, migrate, and provision printers more simply and cost-effectively within Meditech EMR environments. You improve care while reducing infrastructure, support, and service desk costs. And PrinterLogic can help you make it happen.