



Administrator's Guide

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Cluster Guide:

UniPrint Infinity Cluster Guide can be found online for your convenience and is intended to assist Administrators with the installation and configuration of UniPrint Infinity in a two-node Microsoft failover cluster.

- [UniPrint Cluster Guide](#)

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March 29, 2012	Command line option for setting PrintPAL Client to run when a session is started was corrected to UP_SETTING_RUN_PRINTPAL.
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June 5, 2013	Updated instructions and screen shots to reflect changes to www.uniprint.net .
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July 30, 2013	Clarified Print Guard Service instructions for limiting the number of printers that users can access on the vPad.
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What is UniPrint?

UniPrint Infinity is a comprehensive printing solution for Server-based Computing (SbC) and virtual desktop infrastructure (VDI). The UniPrint solution provides users with the flexibility to print to any type of device from a Citrix and/or Remote Desktop Services (formerly known as Terminal Services) session with the additional benefits of Portable Document Format (PDF).

With UniPrint, printing to network or local printers, USB printers or even specialized devices, are all performed by a single universal printer driver, which eliminates extra configuration and confusing options for users. UniPrint Infinity supports both Citrix and Terminal Server architectures.

UniPrint Infinity supports thick or thin-clients or a combination of thick and thin-clients, printing from ICA/RDP sessions or printing from a virtual desktop image in VDI environments.

UniPrint Components

There are three main components that make up UniPrint Infinity: UniPrint Bridge, UniPrint Print Server and UniPrint Application Server. It is important to note that not all UniPrint components need to be installed. Which UniPrint component is installed, and where it is installed, depends on which UniPrint deployment scenario is chosen. Below is description of each key UniPrint component. For more information, see ["Standard Deployment Scenarios" on page 9](#).

UniPrint Bridge

The UniPrint Bridge acts as a communication router and is required in all deployment scenarios. Typically the license server component is also installed on the UniPrint Bridge. The license server component validates UniPrint licenses when each UniPrint Application Server machine connects. UniPrint Bridge is typically installed first, since connectivity can be verified among the

remaining components, UniPrint Printer Server and UniPrint Application Server.

For thin-client only or a combination thin and thick-client environments, SecurePrint Server and PrintPAL Server can also be installed on the UniPrint Bridge.

UniPrint Print Server

UniPrint Print Server is responsible for rendering print jobs and directing them to the appropriate printer.

In enterprises where users are located in different geographic regions or where printing requirements vary greatly from branch office to branch office, UniPrint Print Servers should be located in the same location as the printers themselves. Deploying multiple UniPrint Print Servers has several advantages:

- It distributes the printing workload between remote locations.
- It accommodates differences in regional printing environments.
- It reduces bandwidth consumption by transferring compressed PDF files instead of RAW data files across the network.

Thick-client environments have the option not to install UniPrint Print Server and install UniPrint Client on their workstations instead.

UniPrint Application Server

UniPrint Application Server consists of the UniPrint universal printer driver and is responsible for rendering server-based print jobs to compressed PDF files. This component is installed on a terminal server. For a VDI environment, UniPrint Application Server is installed on the virtual desktop image.

Features of UniPrint Infinity

Pull-printing With UniPrint VPQ (Virtual Print Queue)

With UniPrint VPQ pull-printing has never been easier. Users need not worry about selecting a printer until they authenticate using the UniPrint vPad (user authentication device) or SecurePrint emulator. They can simply send all of their print jobs to the UniPrint VPQ. Later, when they have a spare moment, all they need to do is authenticate, and then select a printer to output their documents.

Avoid printing related security breaches with SecurePrint

In combination with the UniPrint vPad (user authentication device) or SecurePrint emulator, SecurePrint will not release print jobs until the user has authenticated. SecurePrint eliminates unclaimed printed documents thus avoiding potential security breaches and reducing paper waste.

The UniPrint vPad easily connects to any wired network and is printer make and model independent. The vPad not only supports password authentication, but also supports smart cards (both contact and contactless), magnetic stripe and most HID cards (depends on the HID version).

SecurePrint can also be integrated with Active Directory to restrict user access to certain printers. With UniPrint Print Guard, only the accessible printers will be presented to the user on the UniPrint vPad display.

Intuitive Installation Package

The installation package allows UniPrint components to be installed in many different configurations. This empowers Network Administrators to install UniPrint in any way that they see fit for their environment. However, this Administrator's Guide describes best practise scenarios for deployment. For example, the License Server component can now be installed on any server.

UniPrint Universal Print Driver

The streamlined UniPrint driver not only allows the user to e-mail and save their print jobs as PDF files, but the user can also encrypt and password protect these PDF files. This added security ensures that only the intended user can open, read and print the PDF files created with UniPrint.

Version 8.0.1 Updates

Access To Printer Profiles From The VPQ

Although printer profiles are printer make and model specific, users can now initially send their print jobs to the VPQ and then at the vPad, select the appropriate printer and now printer profile. This greatly simplifies custom printer property selection for the user at the vPad.

Re-designed UniPrint Driver Interface

The UniPrint driver interface has been streamlined and simplified. The most commonly used printer properties and features are immediately accessible by the user and the less popular features require an additional click. E-mail and

archiving functions have been moved to separate queues and therefore now require separate configuration inside the UniPrint Management Console.

Default Printer Profiles For Gateway Printer Queues

A default printer profile can be created for each Gateway printer. Default profiles are used by administrators to enforce rules on printers and are not visible to the user.

Version 8.1 Updates

Changes to the Licensing Scheme

In earlier versions of UniPrint Infinity, licenses were checked out on a concurrent session basis. This has now changed such that licenses will be checked out on a concurrent user basis allowing a single user with multiple open sessions to only check out one license.

Advanced PDF Security For PDFs Created With UniPrint

PDF files created from UniPrint, UniPrint (Save PDF), UniPrint (Email PDF) now have the capability of creating secure PDF files that are not only password protected but also includes permission-based security for restricting printing, changing to document content, copying of text and images and adding annotations and form field completion.

Enhancements to PrintPAL

Additional search and filtering features for network objects and Gateway printers have been included for large deployments. The PrintPAL Client has also been integrated into UniPrint LogScript such that the user only sees one icon in their session's notification area. The lightning bolt which represented the PrintPAL Client is no longer visible. To configure PrintPAL, the user only needs to right-click the UniPrint icon.

Enhancements to SecurePrint and the vPad

Within the UniPrint Management Console, vPads can now be placed into logical containers and a search feature has also been added. vPads can be locked down such that only smart cards can activate them for authentication. A static IP address can also be assigned on the physical vPad device itself.

Automatic Print Job Archiving

With this new archive feature, all print jobs directed to any Gateway queue and/or UniPrint queue will be archived to a location designated by the network administrator, resulting in a streamlined archiving process that negates user interaction.

Capturing Print Job Statistics

Print job statistics such as user name, domain, number of black and white print jobs, number of color print jobs, etc. can now be captured for all print jobs sent to any Gateway queue and/or UniPrint queue and are stored in a compact database on the Statistics Server.

Installing & Removing UniPrint

UniPrint Infinity comprises of three main components: UniPrint Bridge, UniPrint Print Server, and UniPrint Application Server. All three components are installed using the same installer. However, the installer needs to be run separately on each server machine.

Other UniPrint components to consider include the following:

- License Server, of which only one instance can exist in the environment. This component is packaged with the UniPrint Bridge. However, the License Server does not necessarily need to be installed on same server as the UniPrint Bridge.
- SecurePrint Server and SecurePrint Data Store are required if the vPad or SecurePrint emulator are being deployed. These are also packaged with the UniPrint Bridge. The SecurePrint print serve components are also required and they are packaged with the UniPrint Print Server.
- Archive Server and Archive Client are used to automatically archive print jobs and can be used to archive print jobs sent to either Gateway printers or to the UniPrint printer or both. Each time a user prints, the print job is automatically archived as a PDF file to the location specified in the UniPrint Management Console.
- Statistics Server and Statistics Client are used to monitor print job statistics for either Gateway printer, the UniPrint printer, the UniPrint (Email PDF) queue or UniPrint (Save PDF) queue. Statistics such as number of pages, color or black & white, user, print queue name, etc. are captured on the Statistics Server.
- PrintPAL Server and PrintPAL Client are used to automatically map printers to devices, IP ranges, users, user groups, and organizational units. PrintPAL Server is packaged with the UniPrint Bridge and PrintPAL Client is packaged with the UniPrint Application Server.
- Adobe Plug-in is for users who print documents that are already in PDF format. This is packaged with the UniPrint Application Server.



NOTE: Upgrading to UniPrint Infinity 8.1 is not supported. In order to “upgrade” to version 8.1, a complete removal of the previous version of UniPrint and then a brand new installation of version 8.1 is required.

Planning Your UniPrint Installation

Recommended System Requirements

To ensure the installation of UniPrint Infinity is successful, ensure that your servers meet the recommended system requirements for each UniPrint component.



NOTE: Microsoft Windows Installer 3.1 or later is required for the UniPrint installation package and can be downloaded from www.microsoft.com. All UniPrint components require .NET Framework 3.5. If only .NET Framework 4.0 has been installed, then .NET Framework 3.5 is still required.

UniPrint Bridge

UniPrint Bridge requires one of the following supported operating systems:

- Microsoft Windows Server 2003 SP1
- Microsoft Windows Server 2008 or R2
- Microsoft Windows Server 2012

UniPrint Print Server

UniPrint Print Server requires one of the following supported operating systems:

- Microsoft Windows XP Professional
- Microsoft Windows Vista
- Microsoft Windows 7
- Microsoft Windows 8
- Microsoft Windows Server 2003 SP1
- Microsoft Windows Server 2008 or R2

UniPrint Application Server

UniPrint Application Server requires one of the following supported operating systems:

- Microsoft Windows Server 2003 SP1 with Terminal Services installed in Application Server Mode
- Microsoft Windows Server 2008 or R2 with Remote Desktop Services role installed
- Microsoft Windows Server 2012 with Remote Desktop Services role installed

In a VDI environment, UniPrint Application Server is installed on each golden image with one of the following supported operating systems:

- Microsoft Windows XP Professional
- Microsoft Windows Vista
- Microsoft Windows 7 (**Note:** *Windows 7 Starter, Home Basic and Home Premium are NOT supported because these versions do not support Remote Desktop Services.*)
- Microsoft Windows 8

Standard Deployment Scenarios

UniPrint Infinity can be deployed in many different environments which includes the following:

- An environment in which workstations with accessible hard disk drives connect to application servers through RDP/ICA, herein called thick-client environments.
- An environment in which thin clients or a combination of thin and thick clients with inaccessible hard disk drives connect to application servers through RDP/ICA, herein called thin and/or combination thin and thick client environments.
- An environment in which workstations and/or thin clients access and print through virtual desktop images, herein called VDI environments.

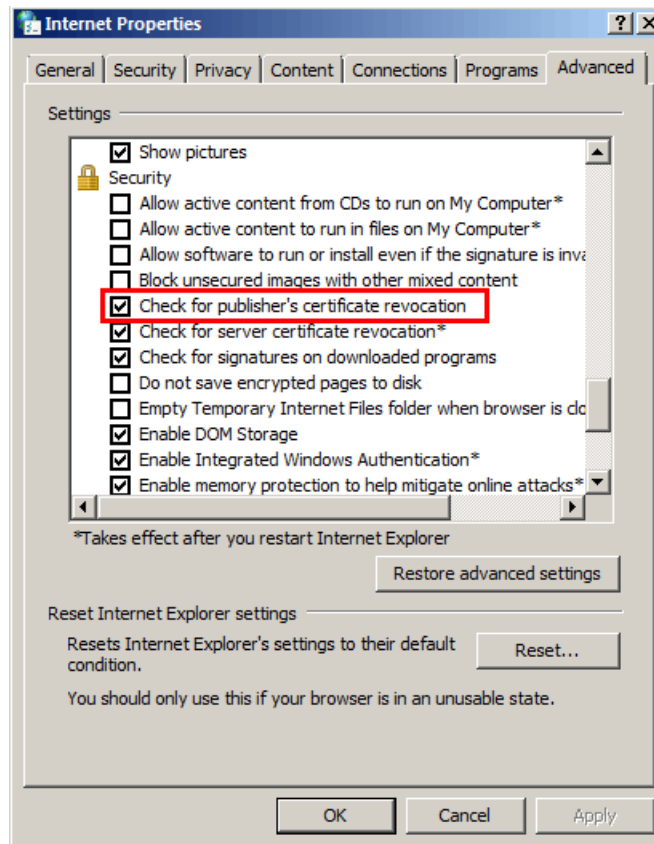
Where to install various UniPrint components depends on the type of client devices that exist in a particular IT infrastructure.

Before installing UniPrint Infinity, ensure that client printer mapping is disabled on the terminal server. For instructions, see ["Disabling Client Printer Mapping on the Terminal Server" on page 17.](#)



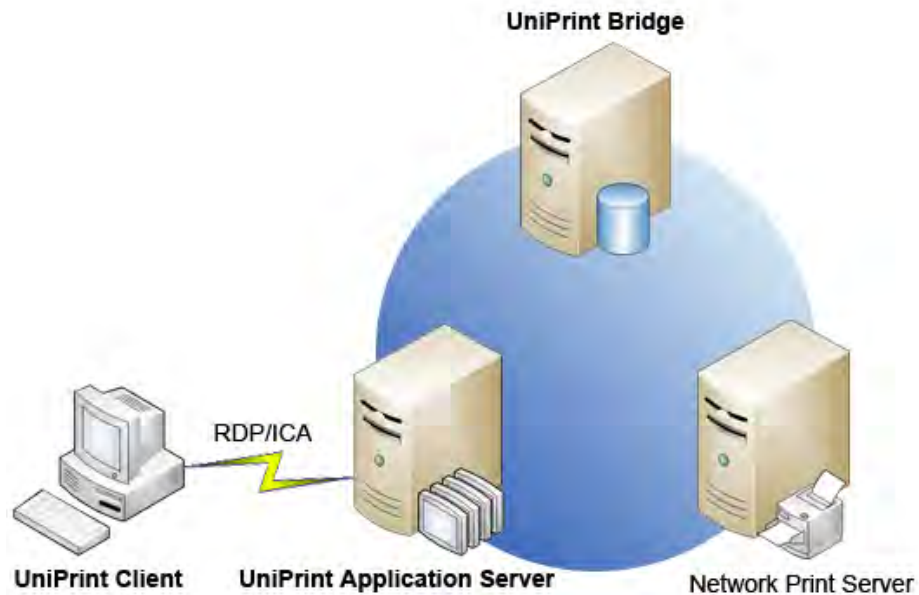
WARNING! If you are installing in an environment that is not connected to the Internet, do the following:

1. From the Control Panel, double-click Internet Properties.
2. Click the Advanced tab.
3. Under Security, clear Check for publisher's certificate revocation and then click OK.



If this option is not disabled, the UniPrint installer will try to register each .NET component and installation will be very slow.

Thick-Client Environments



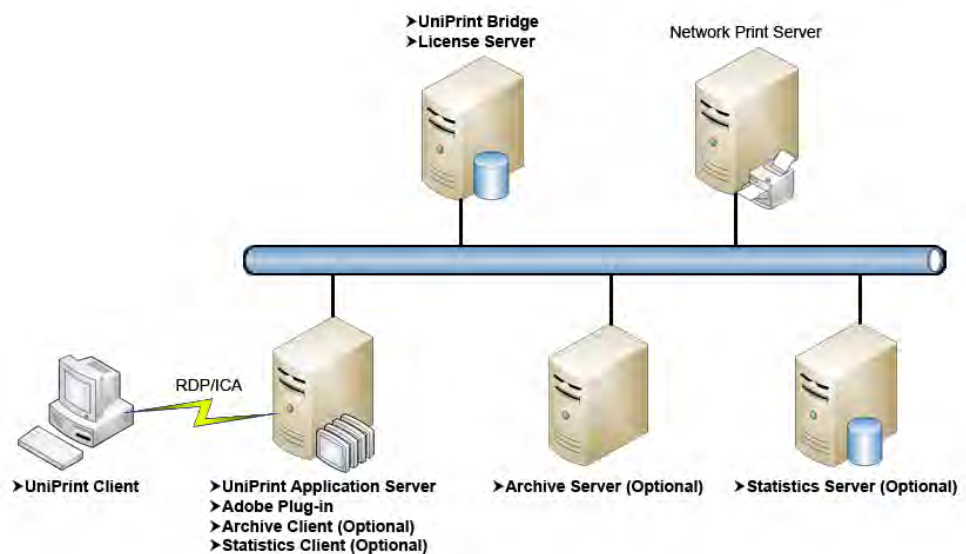
In this environment, workstation users print from RDP/ICA sessions. The connecting workstations must have accessible hard disk drives. Three components are required to be installed on two servers and at least one workstation -- UniPrint Bridge with the License Server, UniPrint Application Server and UniPrint Client.

The recommended installation order is as follows:

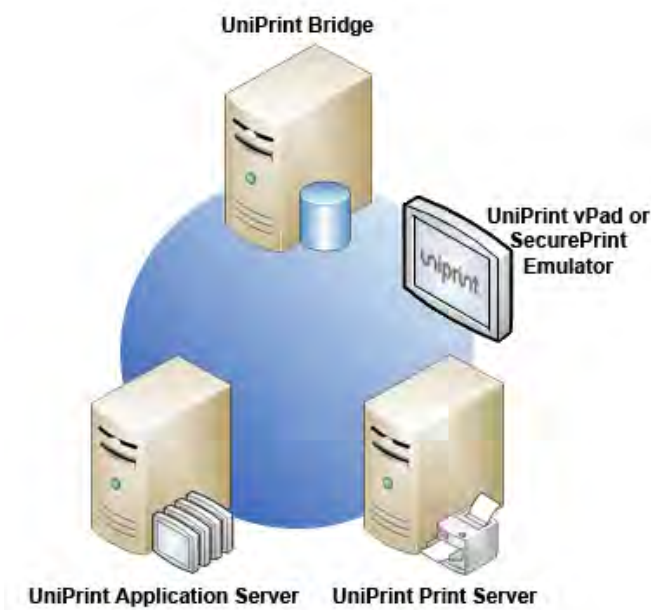
1. Install **UniPrint Bridge** on a server. ***Note:** The **UniPrint License Server** component is packaged with the UniPrint Bridge installation file. The UniPrint license server does not necessarily have to be installed on the same server as UniPrint Bridge, but only one instance of the UniPrint license server can exist on your network.*
2. Install **UniPrint Application Server** on a terminal/Citrix server. The **Adobe Plug-in** is installed by default. ***Note:** It is highly recommended that the Adobe Plug-in also be installed since it prevents UniPrint from re-rendering PDFs. Re-rendered PDFs often results in replaced or missing fonts.*
 - a) **OPTIONAL:** If print job archiving is being deployed, install the **Archive Client** on the same server machine as UniPrint Application Server and also install the **Archive Server** on any file storage machine.

- b) **OPTIONAL:** If print job statistics is being deployed, install the **Statistics Client** on the same server machine as UniPrint Application Server. Also install the **Statistics Server** on a server machine that has the same recommended system requirements as UniPrint Bridge.
3. Install **UniPrint Client** on a workstation with an accessible hard disk drive. Refer to the UniPrint Client Administrator's Guide included in the UniPrint Client download package for information on installing and configuring UniPrint Client.

After installing all components and options, the UniPrint Infinity environment may look similar to the following diagram.



Thin-Clients or Combination Thin- & Thick-Client Environments



In this environment, workstation and/or thin-client users print from RDP and/or ICA sessions. This environment can consist of thin-clients or a combination of thin- and thick-clients. Three components are required to be installed on three servers -- UniPrint Bridge with the License Server, UniPrint Print Server and UniPrint Application Server. UniPrint Client is optional and is only required for those printing to client-attached desktop printers. This environment also allows for SecurePrint and PrintPAL to be deployed.

The recommended installation order is as follows:

1. Install **UniPrint Bridge** on a server. *Note: The **UniPrint license server** component is packaged with the UniPrint Bridge installation file. The UniPrint license server does not necessarily have to be installed on the same server as the UniPrint Bridge, but only one instance of the UniPrint license server can exist on your network.*
 - a) For secure pull printing, install the **SecurePrint Server** component on the UniPrint Bridge.
 - b) PrintPAL is used to automatically map printers to user sessions and the **PrintPAL Server** component is installed on the UniPrint Bridge by default.

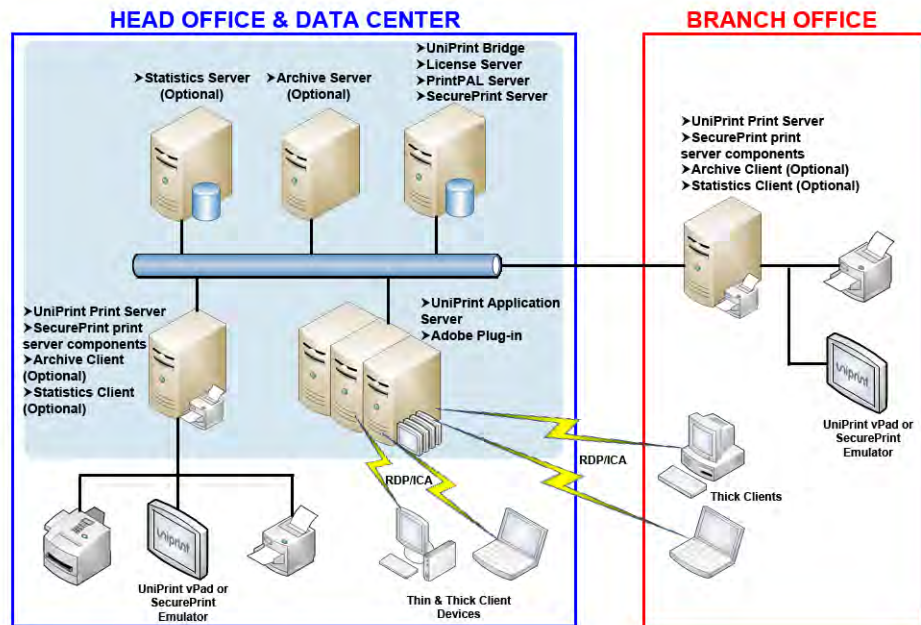
2. Install **UniPrint Print Server** on network print servers. ***Note:** It is recommended NOT to have UniPrint Bridge and UniPrint Print Server running on the same server machine.*
 - a) For secure pull printing, install the **SecurePrint print server components** on the same machine as UniPrint Print Server. The vPad or SecurePrint Emulator will need to connect to this print server in order to release print jobs to the appropriate printer.
 - b) **OPTIONAL:** If print job archiving is being deployed, install the **Archive Client** on the same server machine as UniPrint Print Server and also install the **Archive Server** on any file storage server or device.
 - c) **OPTIONAL:** If print job statistics is being deployed, install the **Statistics Client** on the same server machine as UniPrint Print Server. Also install the **Statistics Server** on a server machine that has the same recommended system requirements as UniPrint Bridge.
3. Install **UniPrint Application Server** on a terminal/Citrix server. The **Adobe Plug-in** is installed by default, for users who print documents that are already in PDF format.



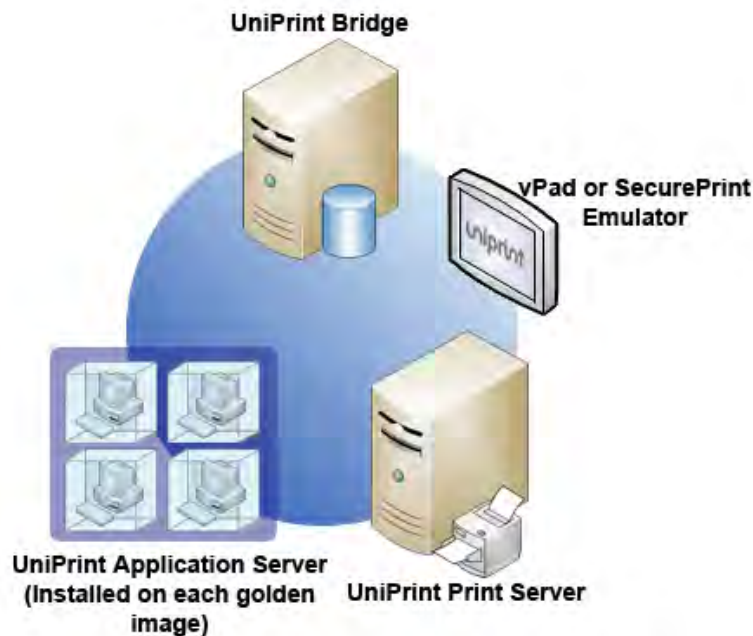
WARNING! For printing fault tolerance, it is recommended that the UniPrint Bridges and/or UniPrint Print Servers be set up in a failover cluster. For information on installing UniPrint Infinity in a failover cluster, refer to the [UniPrint Infinity Cluster Guide](#).

4. **OPTIONAL:** To enable users to print to their desktop printers from their sessions, install UniPrint Client on the user workstation.

After installing all components and options, the UniPrint Infinity environment will look similar to the following diagram.



VDI Environments



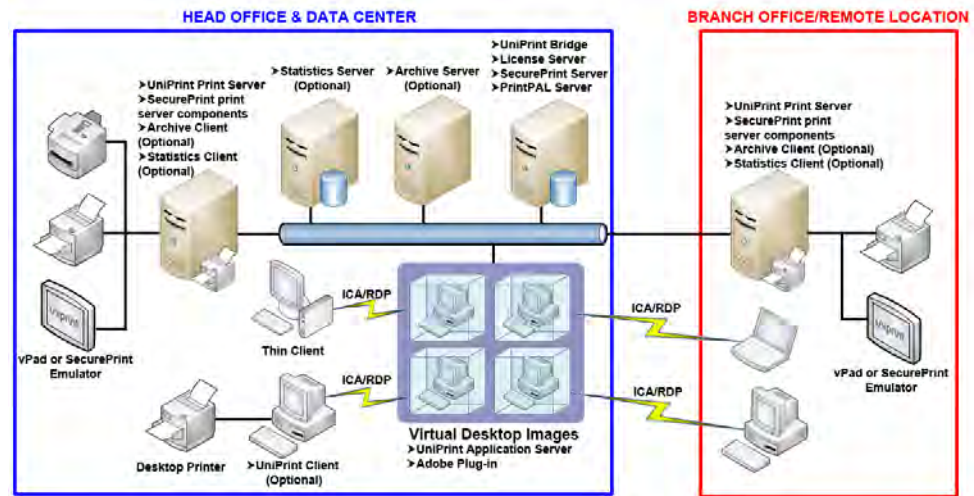
In this environment, workstation and/or users print from within virtual desktop images. This environment consists of thin-clients or a combination of thin- and thick-client devices. Three components are required to be installed

on two servers and on all golden images – UniPrint Bridge with the License Server, UniPrint Print Server and UniPrint Application Server.

The recommended installation order is as follows:

1. Install **UniPrint Bridge** on a server. ***Note:** The **UniPrint license server** component is packaged with the UniPrint Bridge installation file. The UniPrint license server does not necessarily have to be installed on the same server as UniPrint Bridge, but only one instance of the UniPrint license server can exist on your network.*
 - a) For secure pull printing, install the **SecurePrint Server** on the UniPrint Bridge.
 - b) PrintPAL is used to automatically map printers to user sessions and the **PrintPAL Server** is installed by default on the UniPrint Bridge.
2. Install **UniPrint Print Server** on network print servers. ***Note:** It is recommended NOT to have UniPrint Bridge and UniPrint Print Server running on the same server machine.*
 - a) For secure pull printing, install the **SecurePrint print server components** on the same machine as UniPrint Print Server. The vPad or SecurePrint Emulator will need to connect to this print server in order to release print jobs to the appropriate printer.
 - b) **OPTIONAL:** If print job archiving is being deployed, install the **Archive Client** on the same server machine as UniPrint Print Server and also install the **Archive Server** on any file storage machine.
 - c) **OPTIONAL:** If print job statistics is being deployed, install the **Statistics Client** on the same server machine as UniPrint Print Server. Also install the **Statistics Server** on a server machine that has the same recommended system requirements as UniPrint Bridge.
3. Install **UniPrint Application Server** on all golden images. The **Adobe Plug-in** is installed by default for users who print documents that are already in PDF format.
4. **OPTIONAL:** To enable users to print to their desktop printers from their sessions, install **UniPrint Client** on the user workstation.

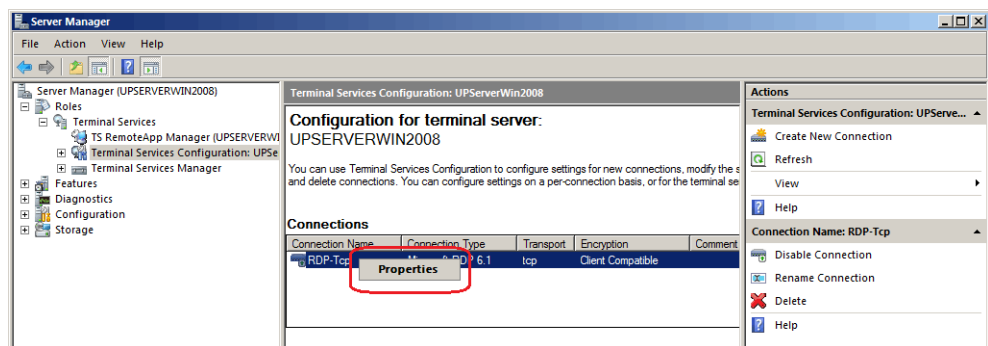
After installing all components and options, the UniPrint Infinity printing environment may look similar to the following diagram.



Disabling Client Printer Mapping on the Terminal Server

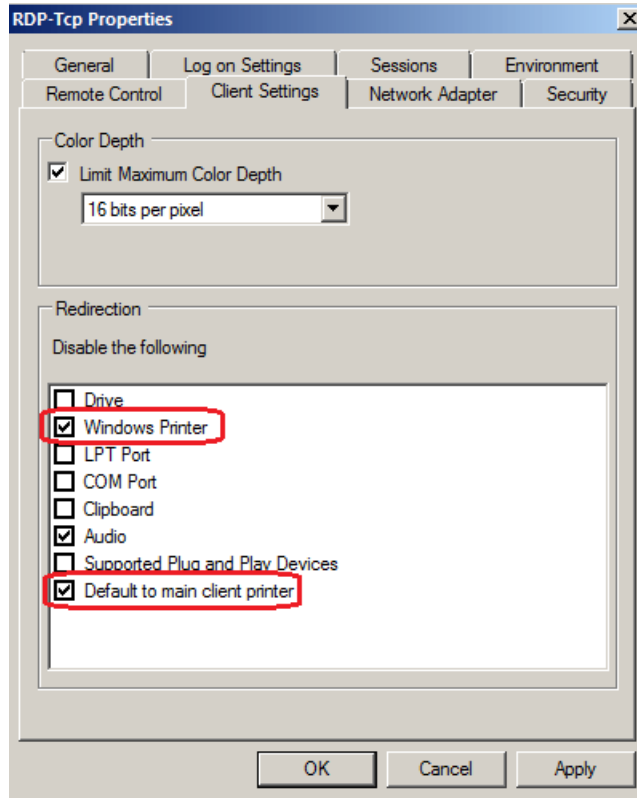
Prior to deploying UniPrint Infinity, it is highly recommended that client printer mapping be disabled on the terminal server. The following instructions assume that the terminal server role has been added to Windows Server 2008.

1. Click **Start**, point to **Administrative Tools** and then click **Server Manager**.
2. In the console tree, expand **Roles** and then **Terminal Services**.
3. Click **Terminal Services Configuration**.
4. Under **Connections**, right-click **RDP-Tcp** and then select **Properties**.



5. Click the **Client Settings** tab.

- Under **Redirection**, select **Windows Printer** and **Default to main client printer** to disable these options.



- Click **Apply** and then click **OK**.

Installing UniPrint Infinity

The following instructions assume that you are installing UniPrint on Windows Server 2008. If you are installing on another platform, you will need to adjust the steps to account for any interface differences. Consult the product documentation for your operating system.

Before installing UniPrint Infinity, it is recommended that you take note of the License Server (UniPrint Bridge) IP address. This information is required when installing UniPrint Print Server and UniPrint Application Server.

Non-interactive command line installation of UniPrint is available. For command line installation instructions, see ["Installing UniPrint from the Command Line" on page 44](#).

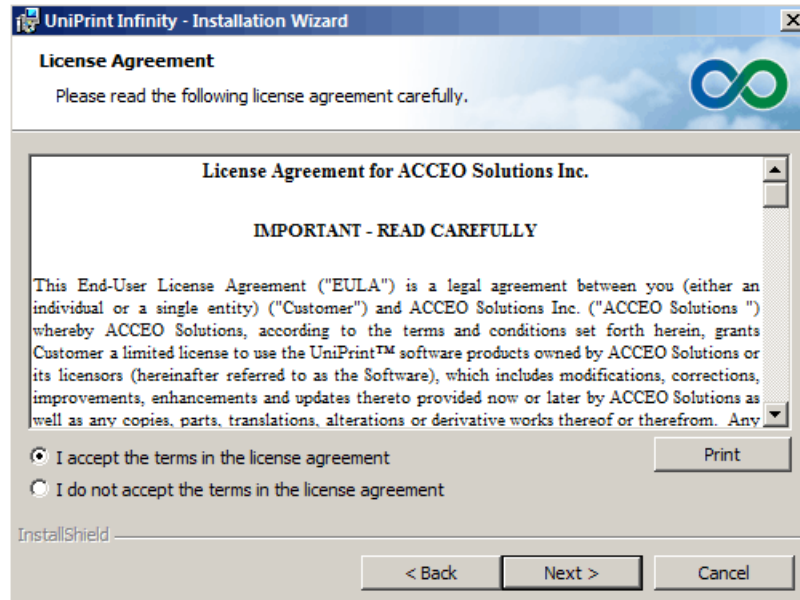
Installing UniPrint Bridge And Its Components

The UniPrint Bridge and its components are typically the first components to install in all deployment scenarios and should be installed on its own server machine.

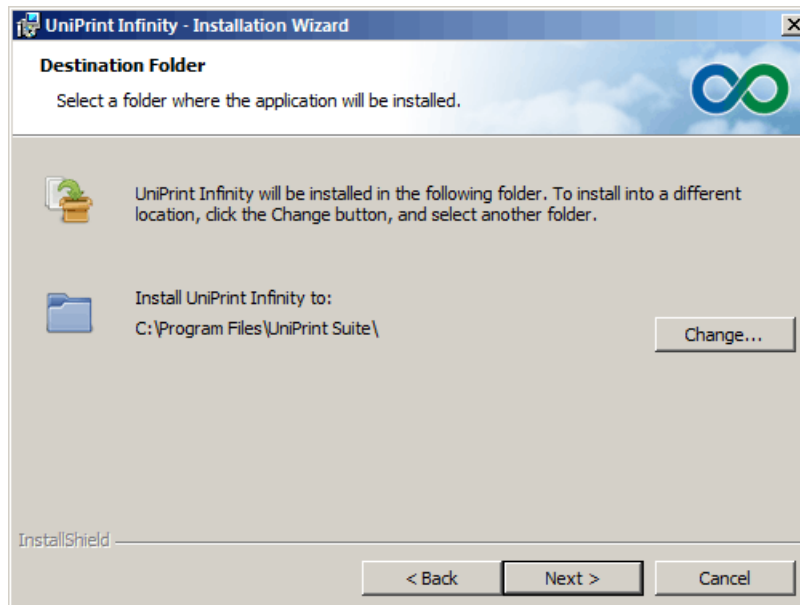
1. On a server machine that meets the recommended system requirements, run the installation program, **Setup.exe** as an administrator.
2. If running **Setup.exe** with UAC enabled, the **User Account Control** dialog box will appear. Click **Yes** to continue.
3. In the **UniPrint Infinity Installation** dialog box, click **Next**.



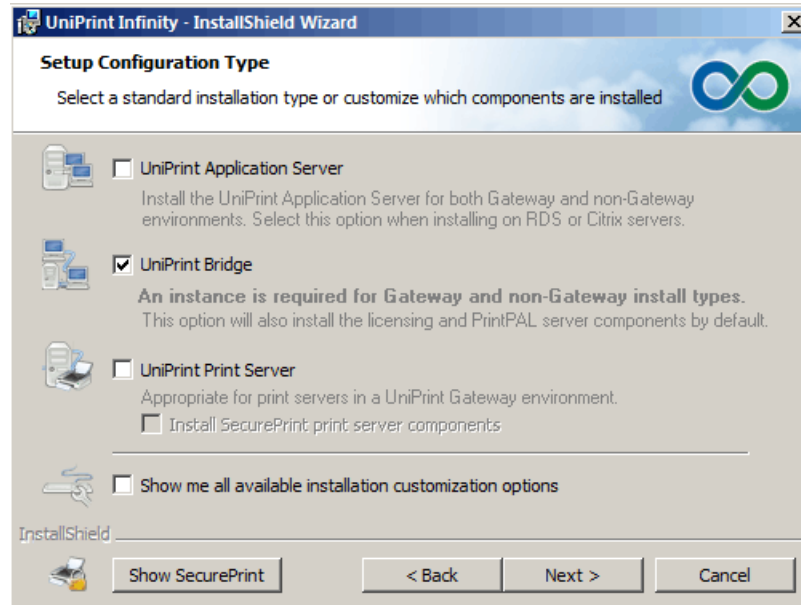
4. In the **License Agreement** dialog box, click **I accept the terms in the license agreement** and then click **Next**.



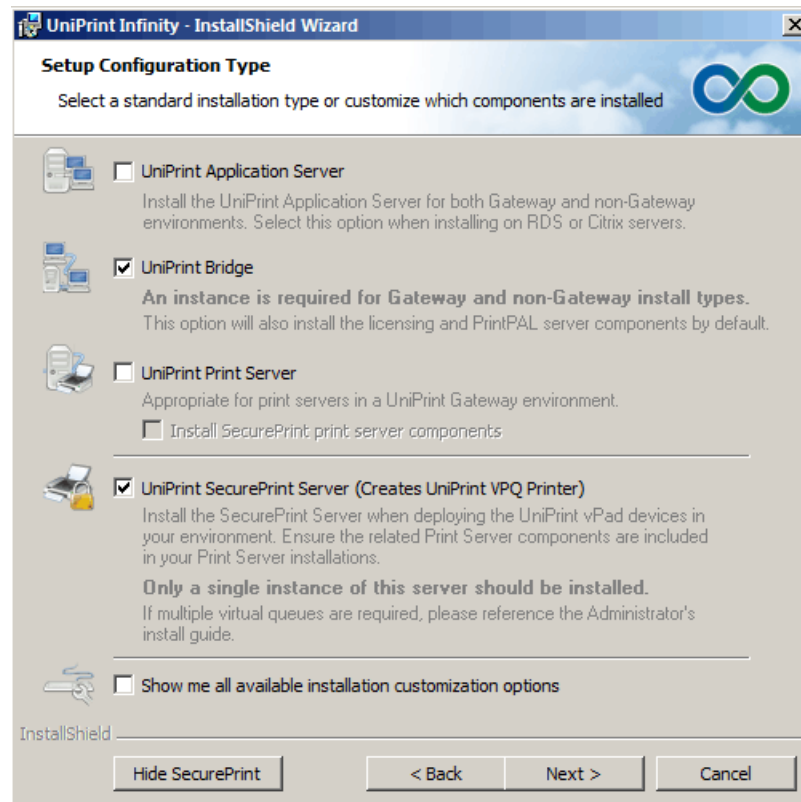
5. In the **Destination Folder** dialog box, click **Next** to accept the default location for the UniPrint program files. To select a different location, click **Change** and then browse to the alternate location.




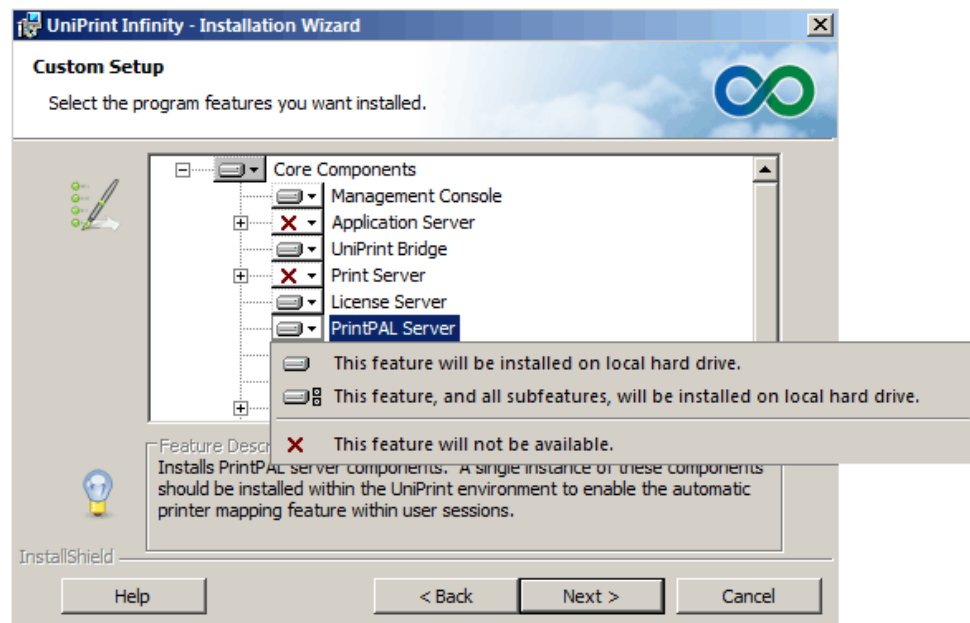
6. In the **Setup Configuration Type** dialog box, select **UniPrint Bridge**.



- a) For SecurePrint deployments, click **Show SecurePrint**. Then select **UniPrint SecurePrint Server (Creates UniPrint VPQ Printer)**.

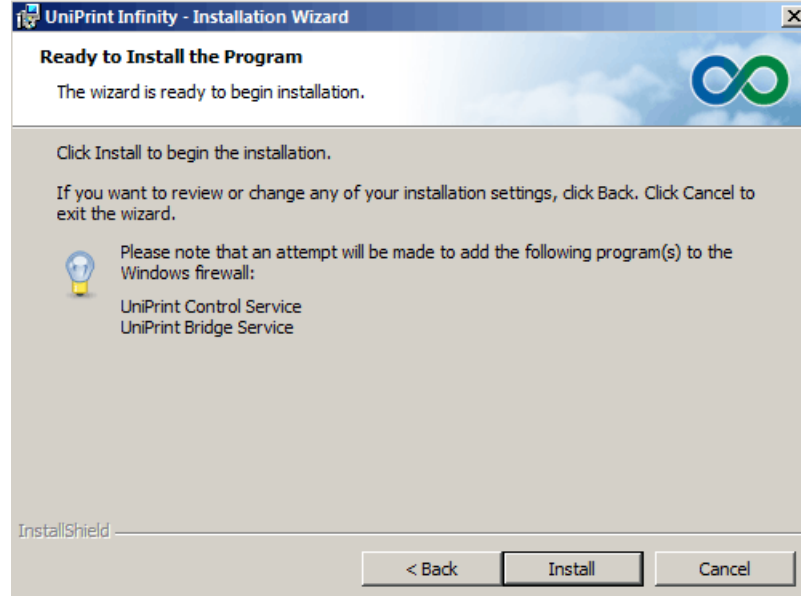


- b) The License Server and PrintPAL Server will be installed by default. If the License Server component is already installed on a different UniPrint Bridge machine, or to prevent PrintPAL Server from being installed, select **Show me all available installation customization options**.
7. Click **Next**.
8. If **Show me all available installation customization options** was selected, the **Custom Setup** dialog box will appear. To prevent a component from being installed, click  beside the component and then select **This feature will not be available**.

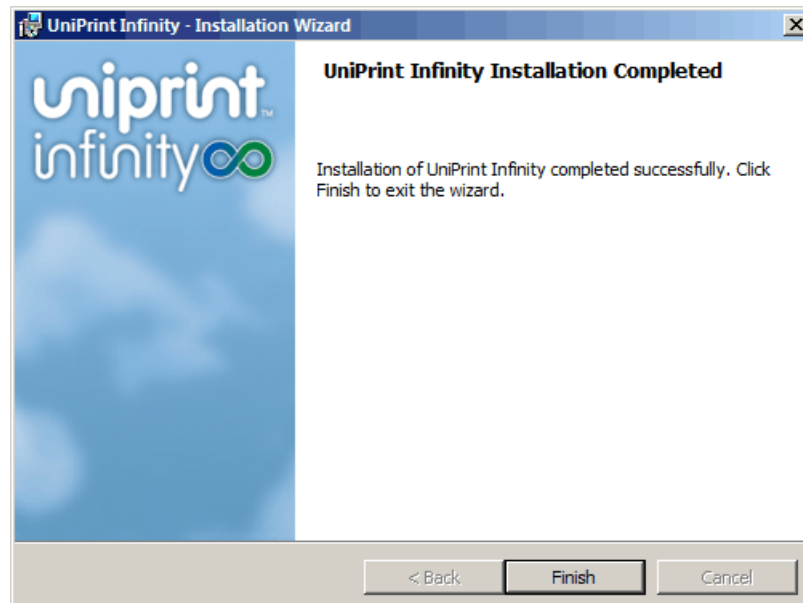


9. Click **Next**.

10. In the **Ready to Install the Program** dialog box, click **Install**. UniPrint installer will copy files to the destination folder.

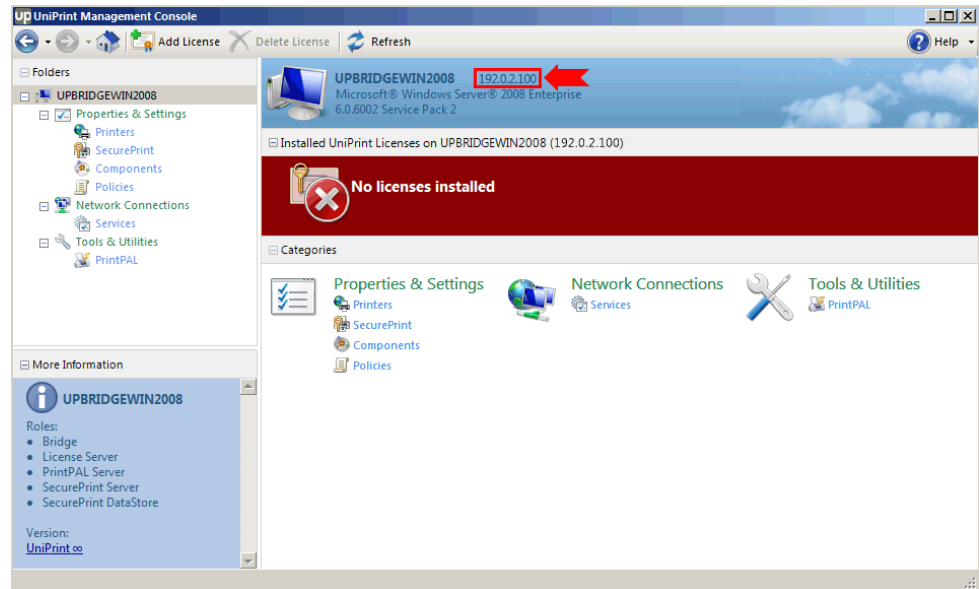


11. Click **Finish** to complete the installation.



12. Click **Start, All Programs, UniPrint Suite** and then click **UniPrint Management Console**.

13. At the top of the console, take note of the IP address. This is required when installing UniPrint Print Server and UniPrint Application Server.



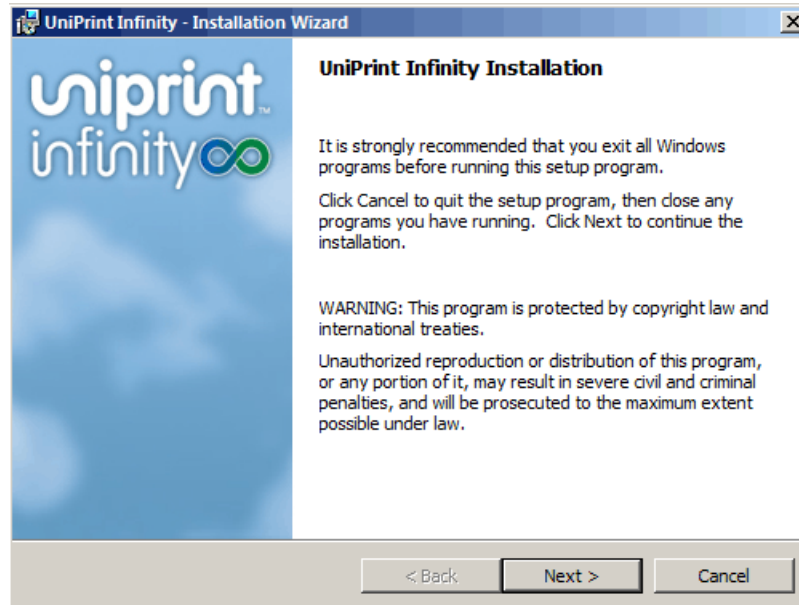
Installing UniPrint Print Server And Its Components

The UniPrint Print Server and its components are typically the second components to be installed in thin client, mixed thin and thick client environments and VDI environments.

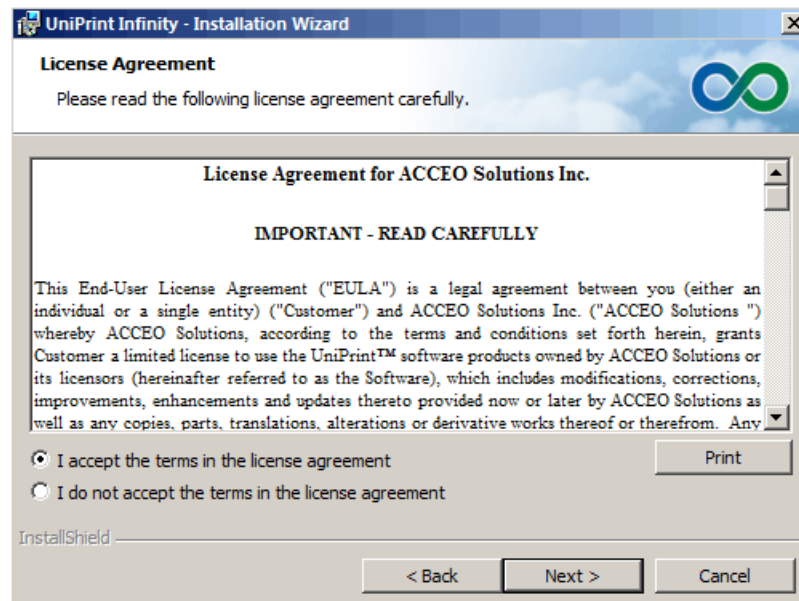
For thick client environments, this component is not required. Continue the installation process by ["Installing UniPrint Application Server And Its Components" on page 29](#).

1. On a network print server that meets the recommended system requirements, run the installation program, **Setup.exe** as an administrator.
2. If running **Setup.exe** with UAC enabled, the **User Account Control** dialog box will appear. Click **Yes** to continue.

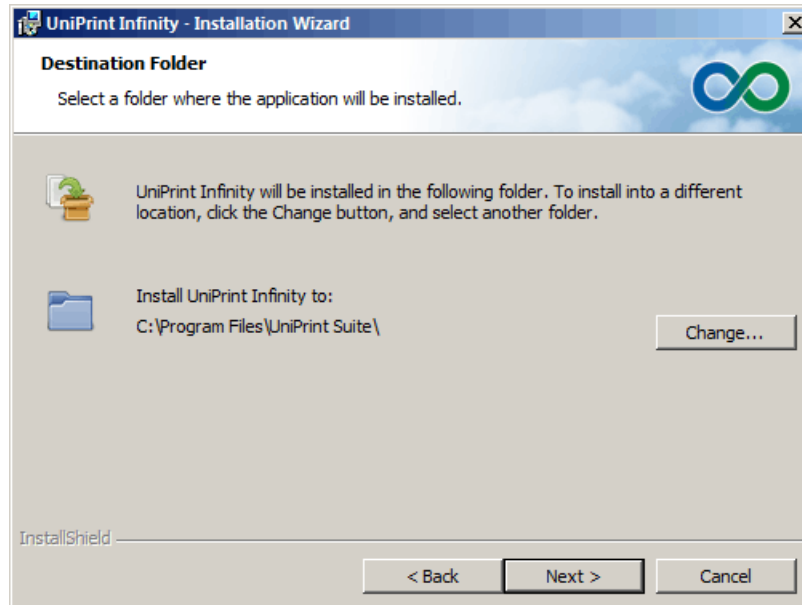
3. In the **UniPrint Infinity Installation** dialog box, click **Next**.



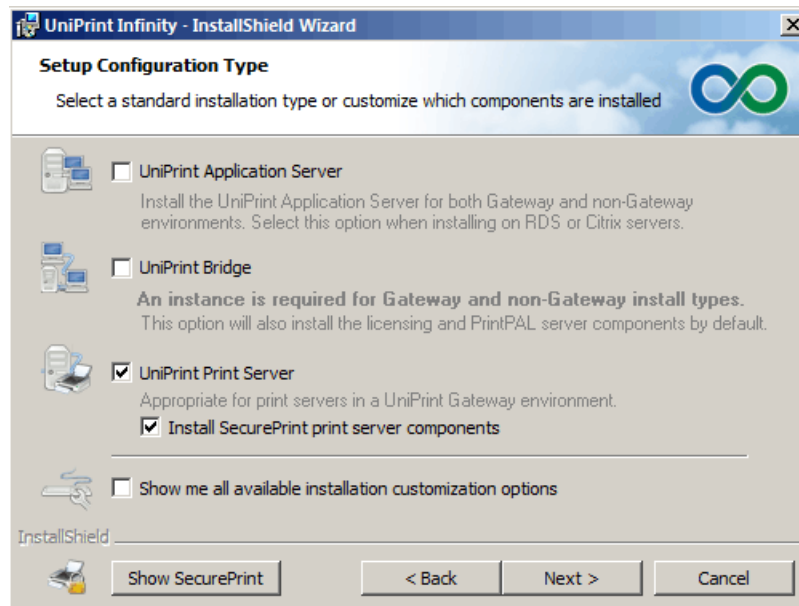
4. In the **License Agreement** dialog box, click **I accept the terms in the license agreement** and then click **Next**.



5. In the **Destination Folder** dialog box, click **Next** to accept the default location for the UniPrint program files. To select a different location, click **Change** and then browse to the alternate location.

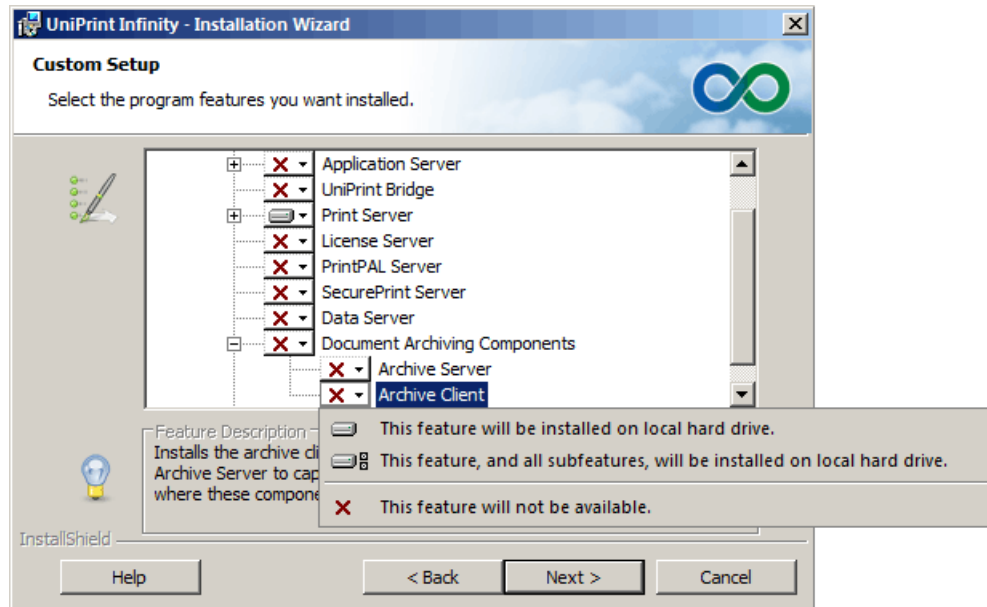



6. In the **Setup Configuration Type** dialog box, select **UniPrint Print Server**.

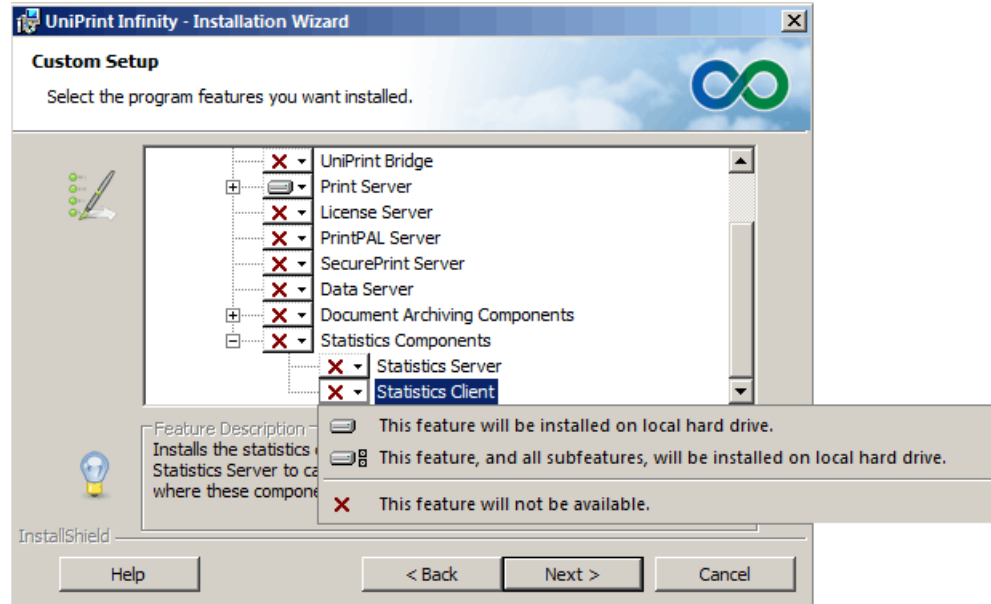


- a) If secure pull printing is being deployed, click **Install SecurePrint print server components**.
- b) If print job archiving and/or print job statistics monitoring are being deployed, select **Show me all available installation customization options**.

7. Click **Next**.
8. If **Show me all available installation customization** options was selected the **Custom Setup** dialog box will appear.
 - a) To archive print jobs directed to printers on this print server, expand **Document Archive Components**. Beside **Archive Client**, click  and then select **This feature will be installed on local hard drive**.

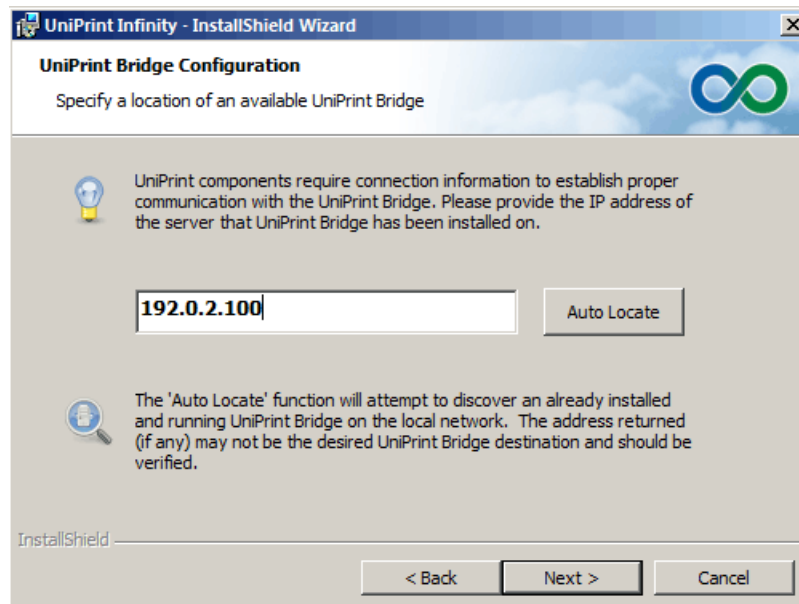


- b) To monitor print job statistics for all print jobs directed to this print server, expand **Statistics Components**. Beside **Statistics Client**, click  and then select **This feature will be installed on local hard drive**.

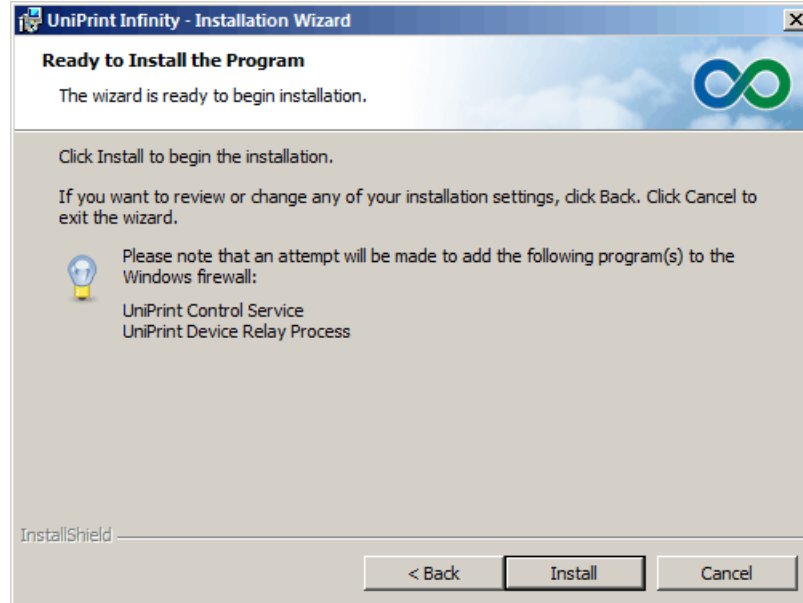


9. Click **Next**.

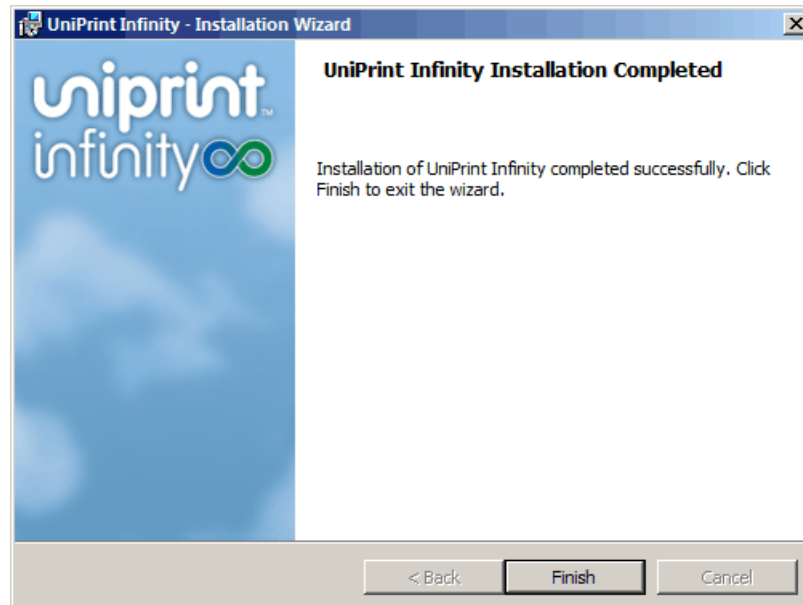
10. In the **UniPrint Bridge Configuration** dialog box, enter the **IP Address** of the License Server (typically the UniPrint Bridge) or click **Auto Locate** to run an auto-discovery function to find an already installed and running License Server. *NOTE: If using the **Auto Locate** function in an environment where there are multiple UniPrint Bridges, ensure that the IP address located is that of the intended License Server before proceeding.* Click **Next** to continue.



11. In the **Ready to Install the Program** dialog box, click **Install**. UniPrint installer will copy files to the destination folder.



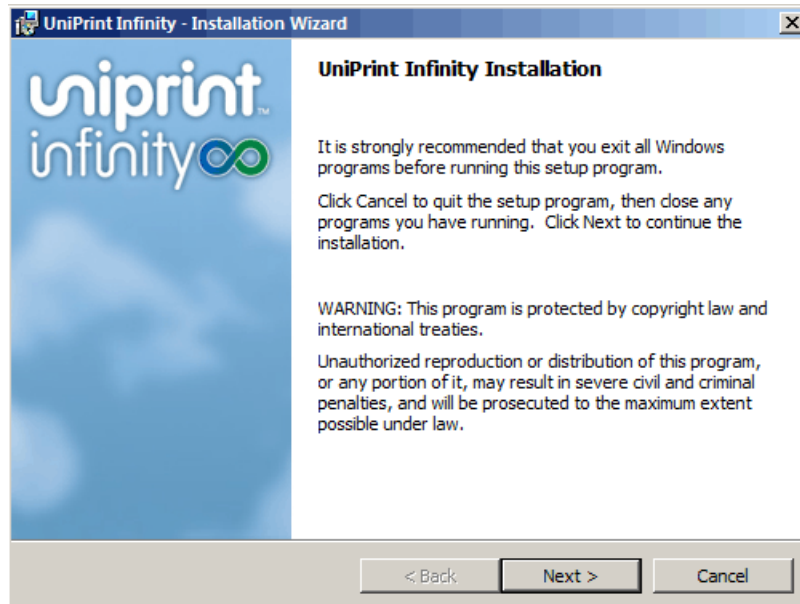
12. Click **Finish** to complete the installation.



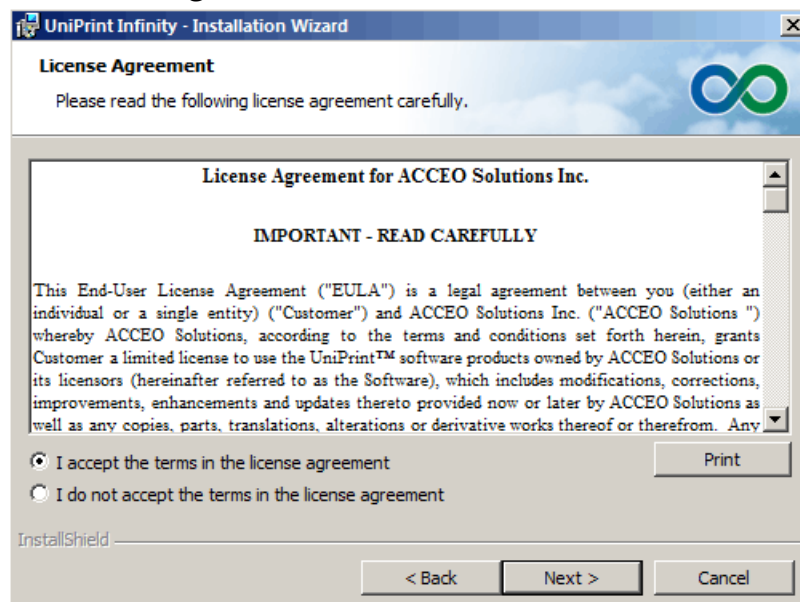
Installing UniPrint Application Server And Its Components

UniPrint Application Server and its components are the second components to install in a thick client environment and the third components to install in thin client and mixed thin and thick client environments or VDI environments.

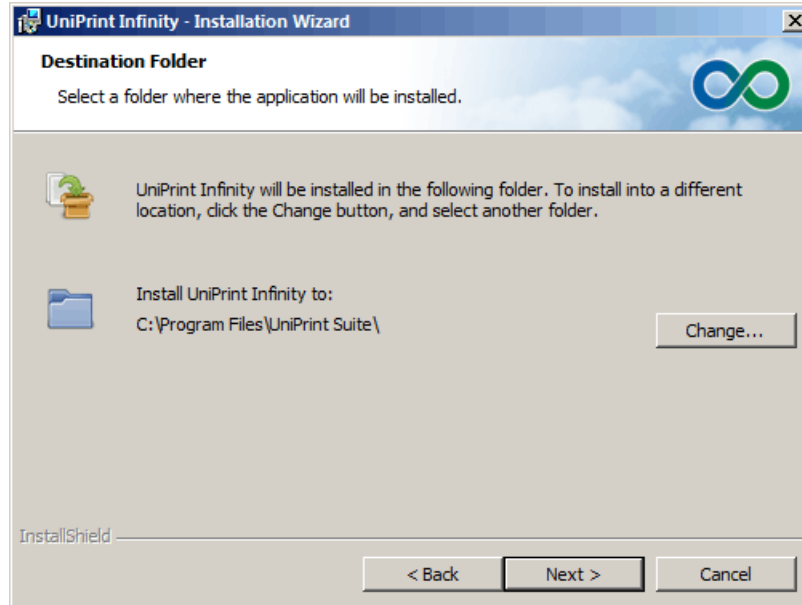
1. On a terminal server that meets the recommended system requirements, run the installation program, **Setup.exe** as an administrator.
2. If running **Setup.exe** with UAC enabled, the **User Account Control** dialog box will appear. Click **Yes** to continue.
3. In the **UniPrint Infinity Installation** dialog box, click **Next**.



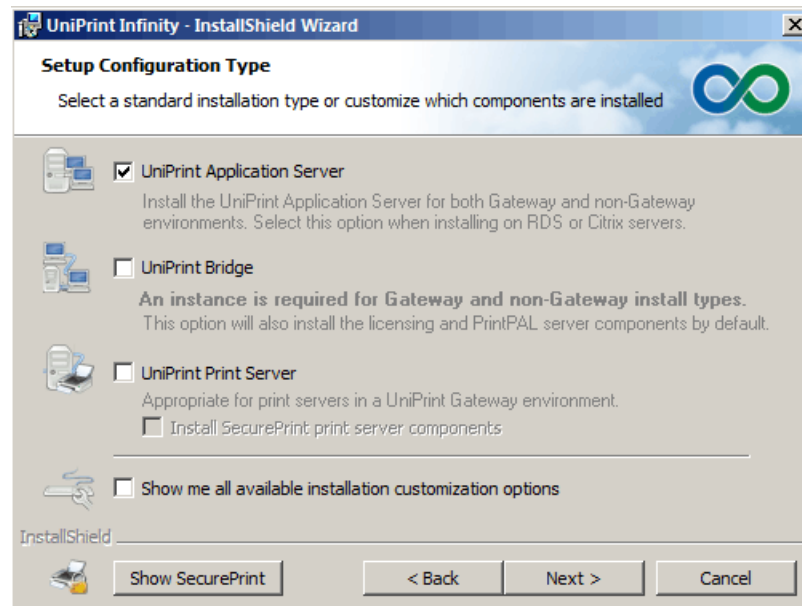
4. In the **License Agreement** dialog box, click **I accept the terms in the license agreement** and then click **Next**.



5. In the **Destination Folder** dialog box, click **Next** to accept the default location for the UniPrint program files. To select a different location, click **Change** and then browse to the alternate location.




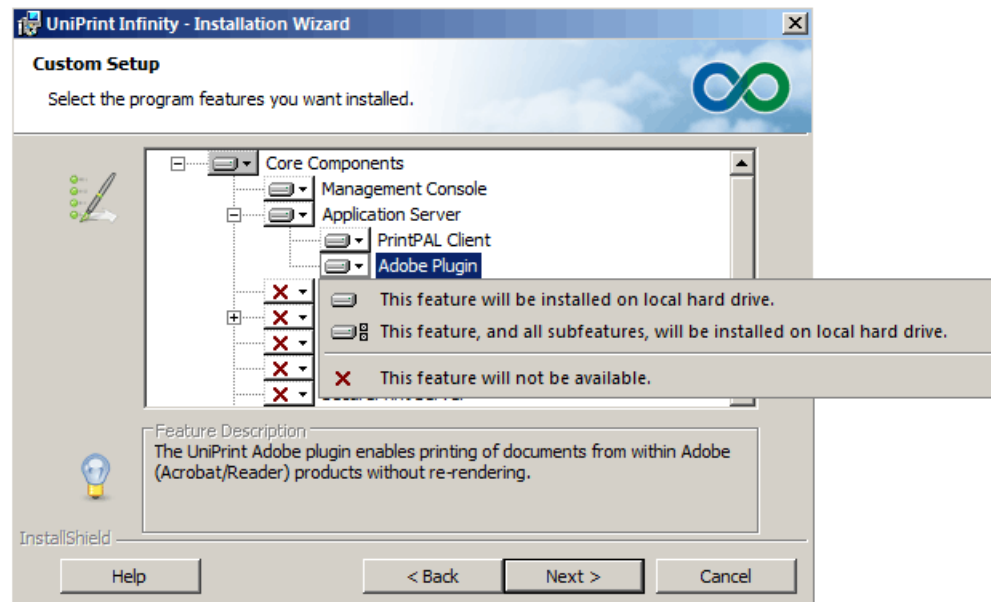
6. In the **Setup Configuration Type** dialog box, select **UniPrint Application Server**.



- a) PrintPAL Client and the Adobe Plug-in are set to be installed by default. It is highly recommended that the Adobe Plug-in be installed since it instructs UniPrint not to re-render print jobs that are already in PDF format. Re-rendering PDF files often results in undesirable output or missing fonts. To prevent one or both

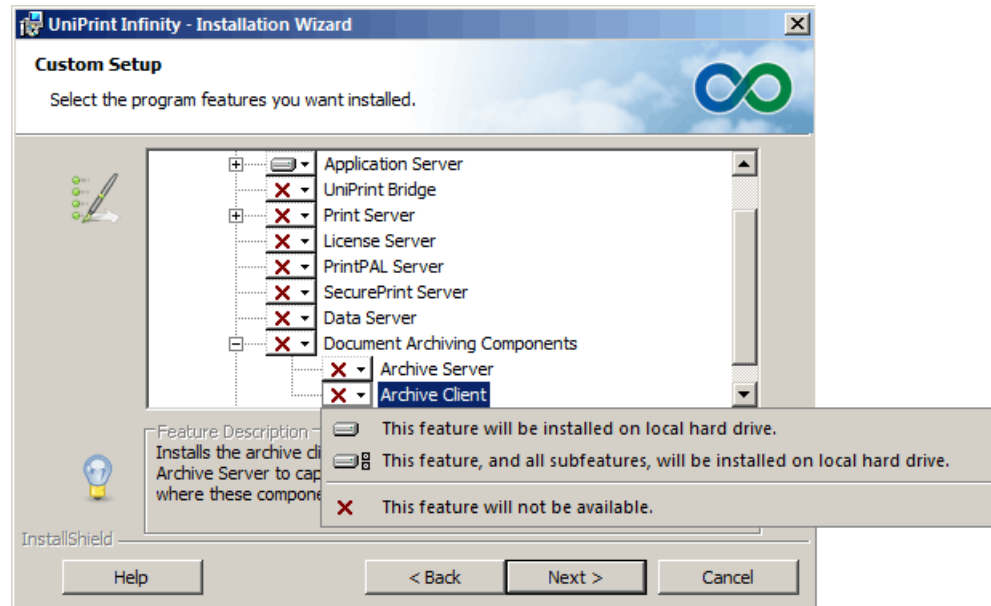
components from being installed, select **Show me all available installation customization options**.

- b) If print job archiving and/or print job statistics monitoring on the UniPrint or the UniPrint (Email PDF) queues are being deployed, select **Show me all available installation customization options**.
7. Click **Next**.
 8. If **Show me all available installation customization options** was selected, the **Custom Setup** dialog box will appear.
 - a) To disable a component, click  beside the component and then select **This feature will not be available**.

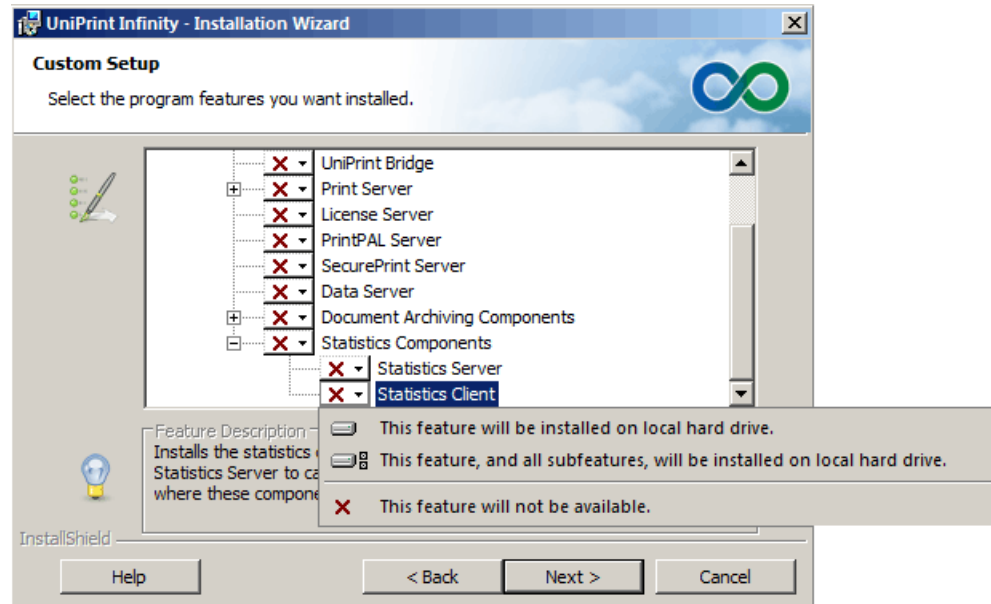


- b) To archive print jobs sent the UniPrint queue and/or the UniPrint (Email PDF) queue, expand **Document Archiving**

Components and then select **This feature will be installed on local hard drive.**



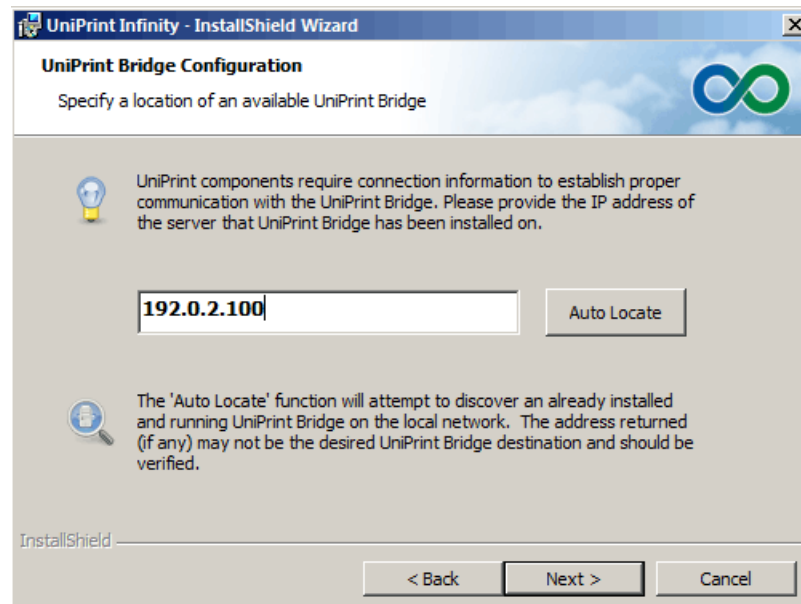
- c) To capture print job statistics for print jobs sent to the UniPrint queue, the UniPrint (Email PDF) and UniPrint (Save PDF) queues, expand **Statistics Components** and then select **This feature will be installed on local hard drive.**



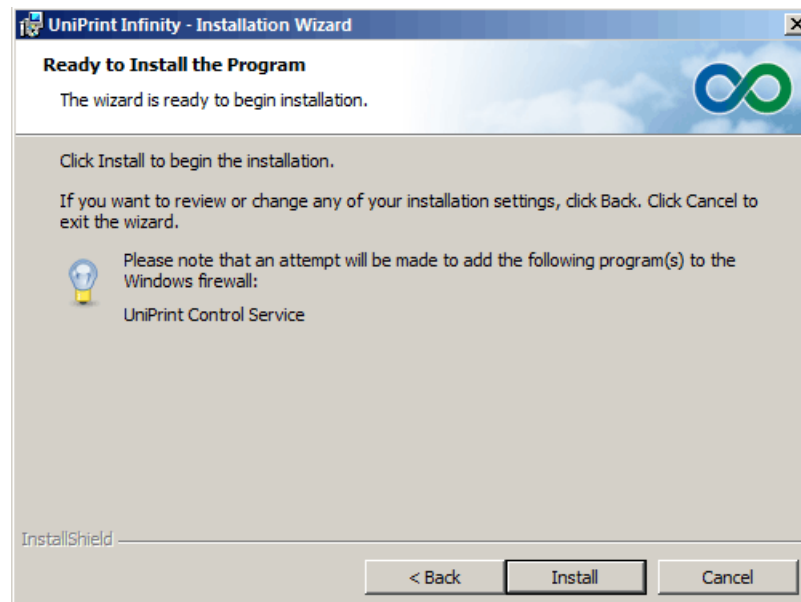
9. Click **Next**.

10. In the **UniPrint Bridge Configuration** dialog box, enter the **IP Address** of the License Server (typically the UniPrint Bridge) or click **Auto Locate** to run an auto-discovery function to find an already

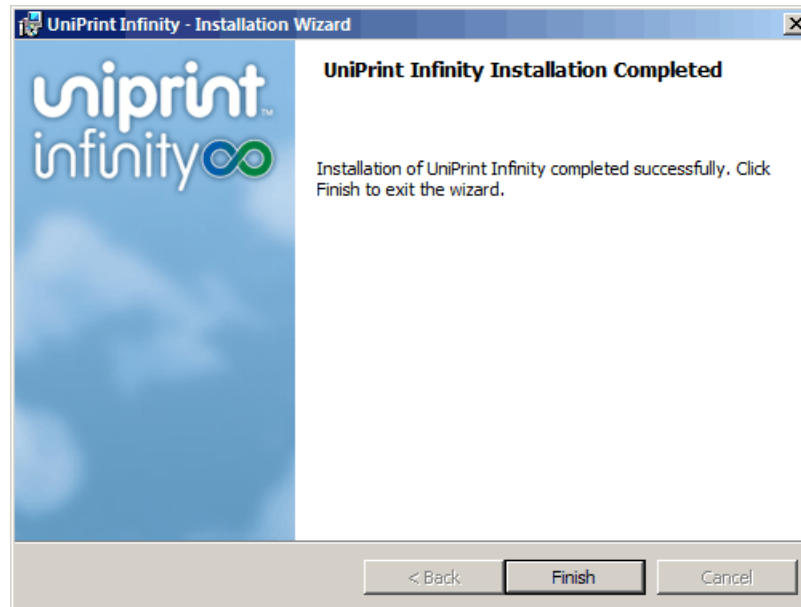
installed and running License Server. *NOTE: If using the **Auto Locate** function in an environment where there are multiple UniPrint Bridges, ensure that the IP address located is that of the intended License Server before proceeding.* Click **Next** to continue.



11. In the **Ready to Install the Program** dialog box, click **Install**. UniPrint installer will copy files to the destination folder.



12. Click **Finish** to complete the installation.

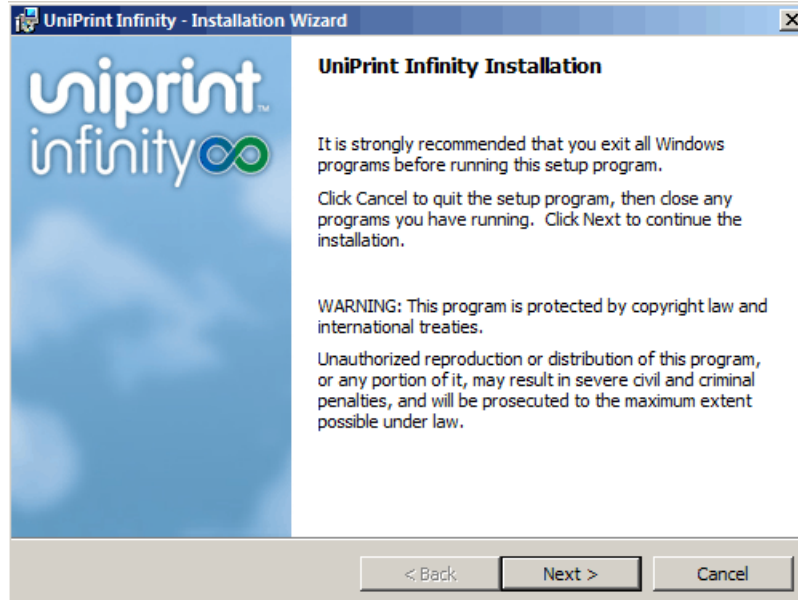


13. For thick client environments, proceed by installing the UniPrint Client on all workstations accessing the terminal server through ICA or RDP. This is optional for thin client, mixed thin and thick client and VDI environments. UniPrint Client is a separate download package and can be downloaded from www.uniprint.net/eng/products/view/uniprint-client. Follow the instructions for installing UniPrint Client that are included with the UniPrint Client download package.
14. For print job archiving, proceed by installing the Archive Server on a server machine that meets the same system requirements as the UniPrint Bridge. Refer to ["Installing the Archive Server Component" on page 35](#).
15. For print job statistics monitoring, proceed by installing the Statistics Server on a server machine that meets the same system requirements as the UniPrint Bridge. Refer to ["Installing the Statistics Server Component" on page 39](#).

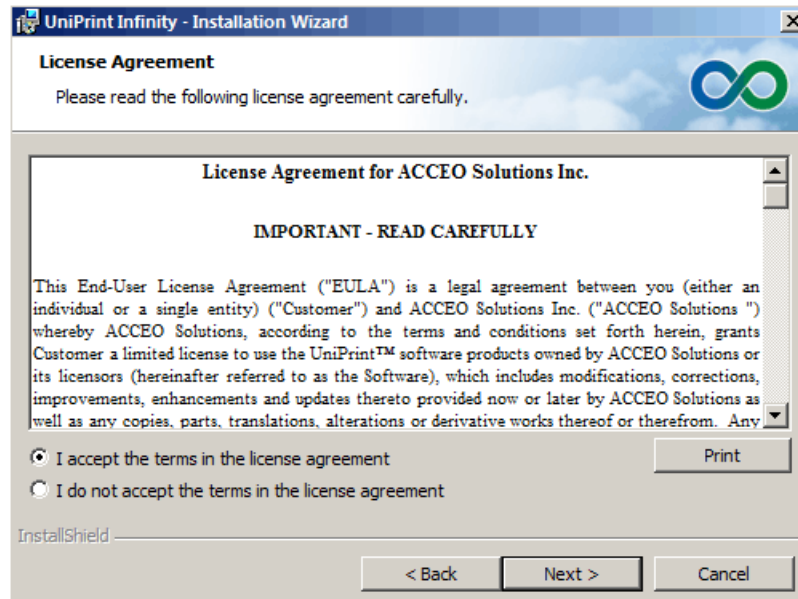
Installing the Archive Server Component

The Archive Server component is installed on the file storage server that will host archived print jobs. This component must meet the same recommended system requirements as the UniPrint Bridge and the storage capacity depends on the amount of printing done within an organization.

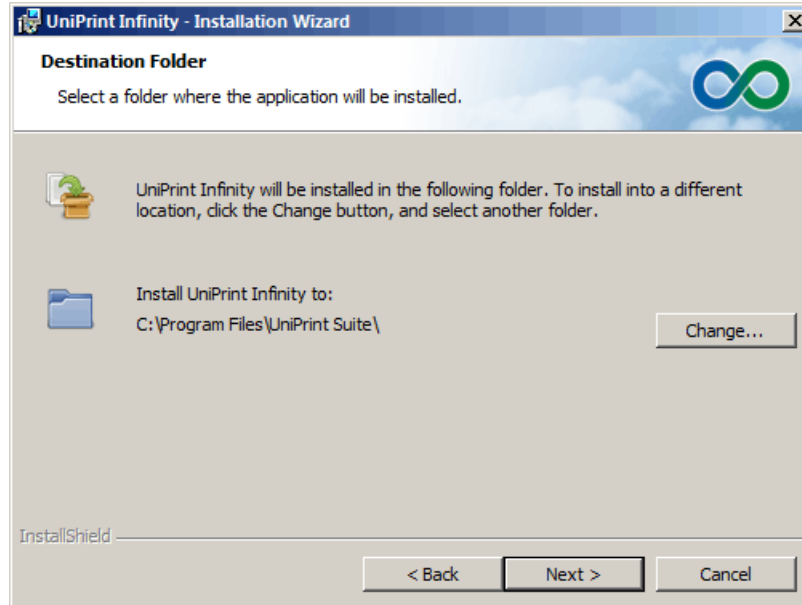
1. On the intended archive server, right-click the installation program, **Setup.exe** and select **Run as administrator**.
2. If running **Setup.exe** with UAC enabled, the **User Account Control** dialog box will appear. Click **Yes** to continue.
3. In the **UniPrint Infinity Installation** dialog box, click **Next**.



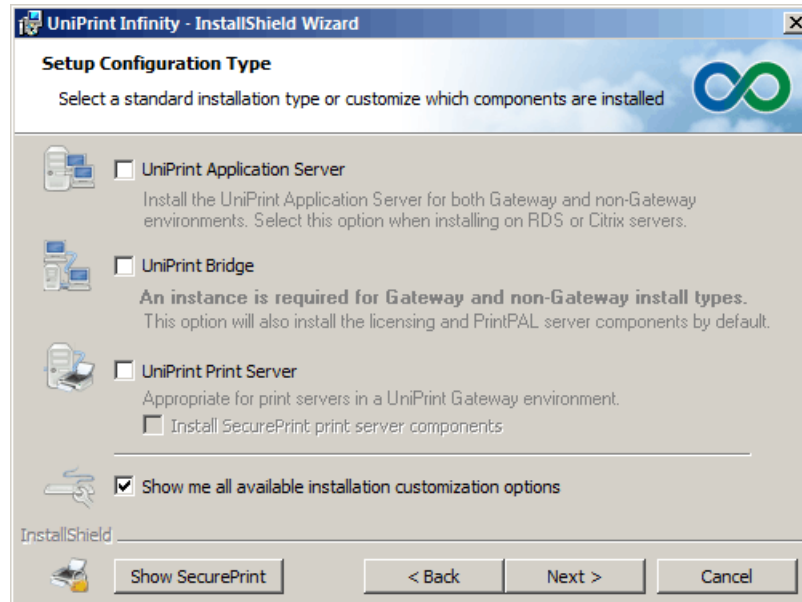
4. In the **License Agreement** dialog box, click **I accept the terms in the license agreement** and then click **Next**.




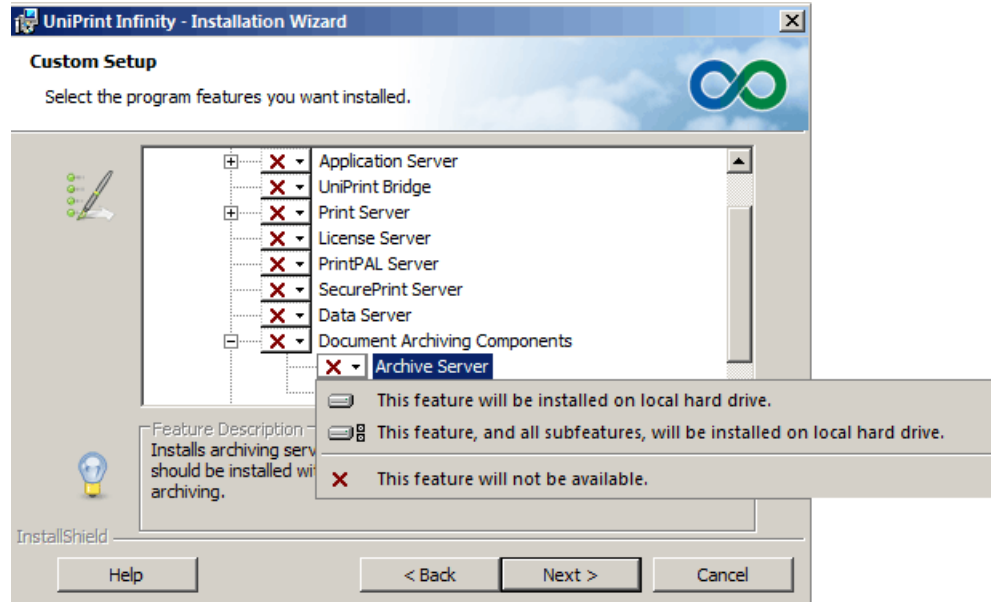
5. In the **Destination Folder** dialog box, click **Next** to accept the default location for the UniPrint program files. To select a different location, click **Change** and then browse to the alternate location.



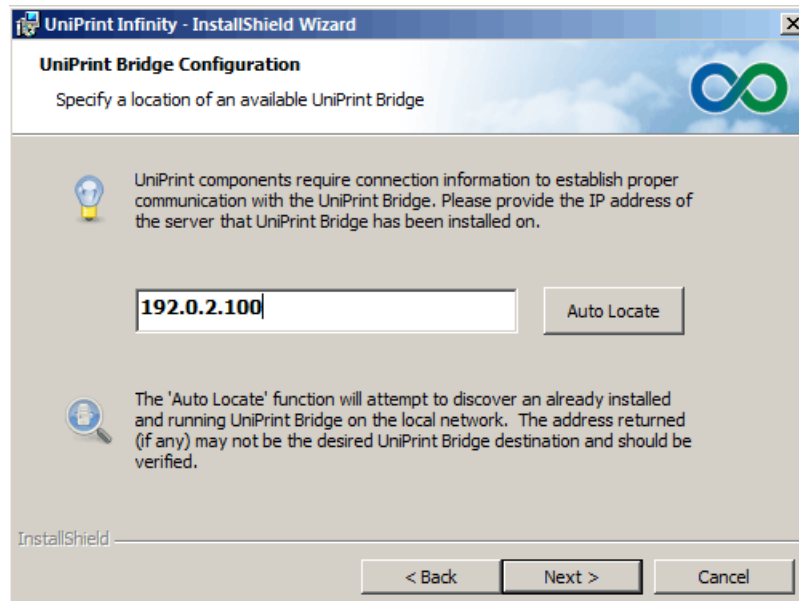
6. In the **Setup Configuration Type** dialog box, select **Show me all available installation customization options** and then click **Next**.



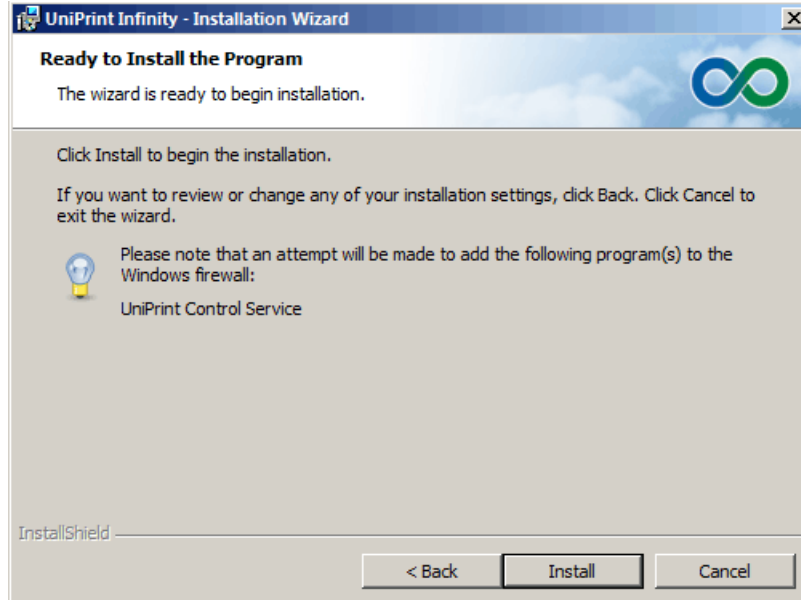
7. In the **Custom Setup** dialog box, expand **Document Archiving Components**. Beside **Archive Server**, click  and then select **This feature will be installed on local hard drive**. Click **Next**.



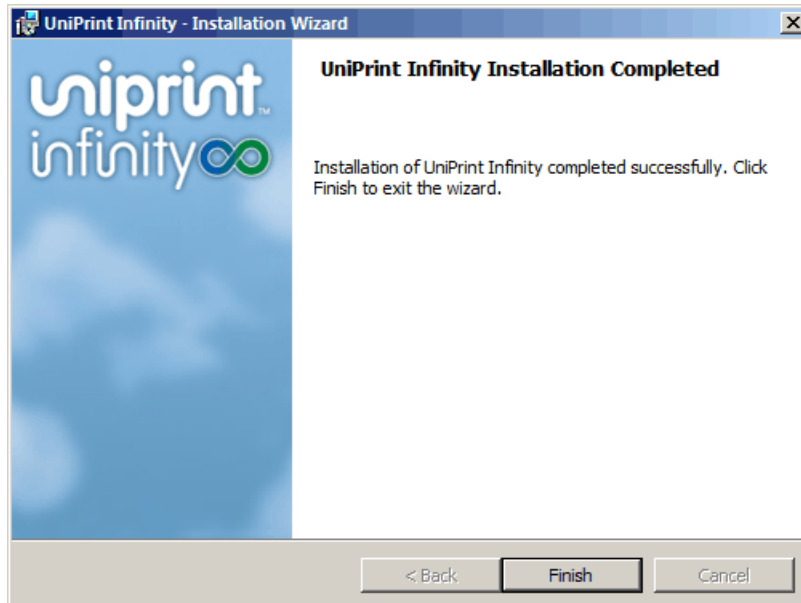
8. In the **UniPrint Bridge Configuration** dialog box, enter the **IP Address** of the License Server (typically the UniPrint Bridge) or click **Auto Locate** to run an auto-discovery function to find an already installed and running License Server. *NOTE: If using the **Auto Locate** function in an environment where there are multiple UniPrint Bridges, ensure that the IP address located is that of the intended License Server before proceeding.* Click **Next** to continue.



9. In the **Ready to Install the Program** dialog box, click **Install**. UniPrint installer will copy files to the destination folder.



10. Click **Finish** to complete the installation.



Installing the Statistics Server Component

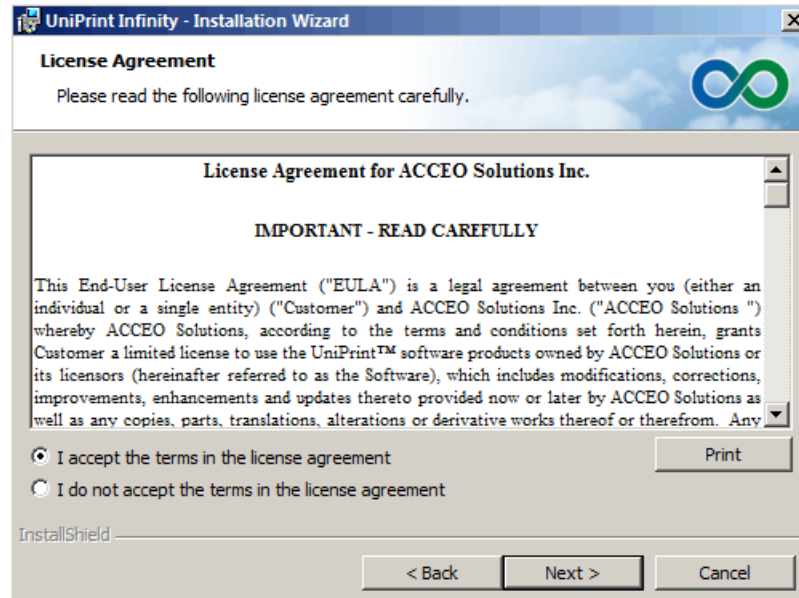
The Statistics Server component is installed on a server machine that has the same system requirements as the UniPrint Bridge. This server will host all captured print job data in a database.

1. On the intended statistics server, run the installation program, **Setup.exe** as an administrator.

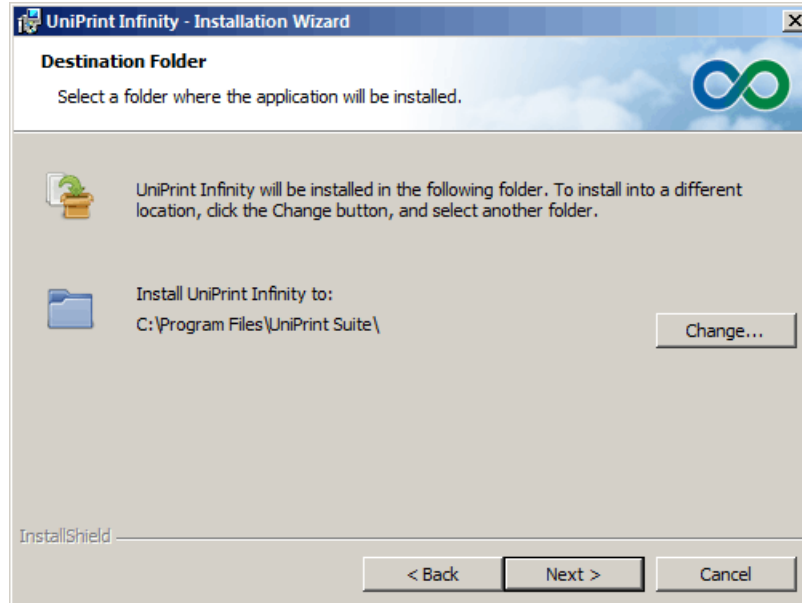
2. If running **Setup.exe** with UAC enabled, the **User Account Control** dialog box will appear. Click **Yes** to continue.
3. In the **UniPrint Infinity Installation** dialog box, click **Next**.



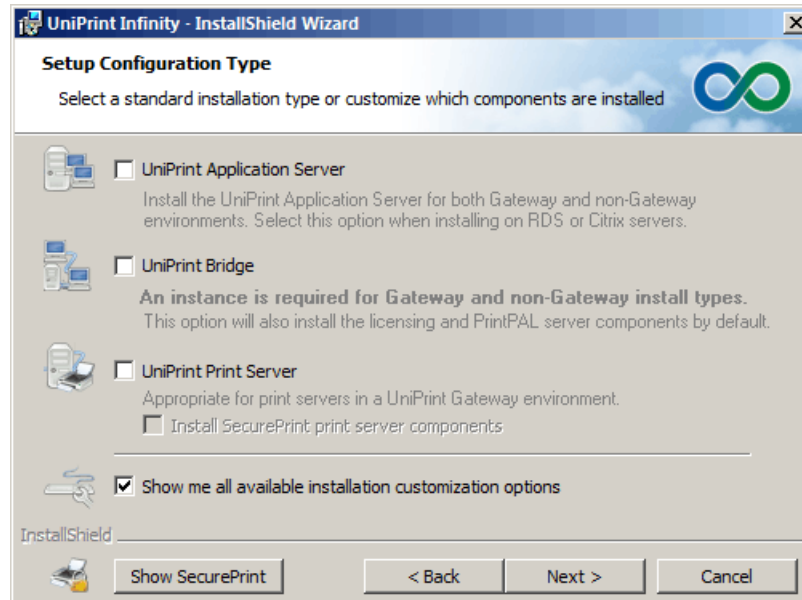
4. In the **License Agreement** dialog box, click **I accept the terms in the license agreement** and then click **Next**.




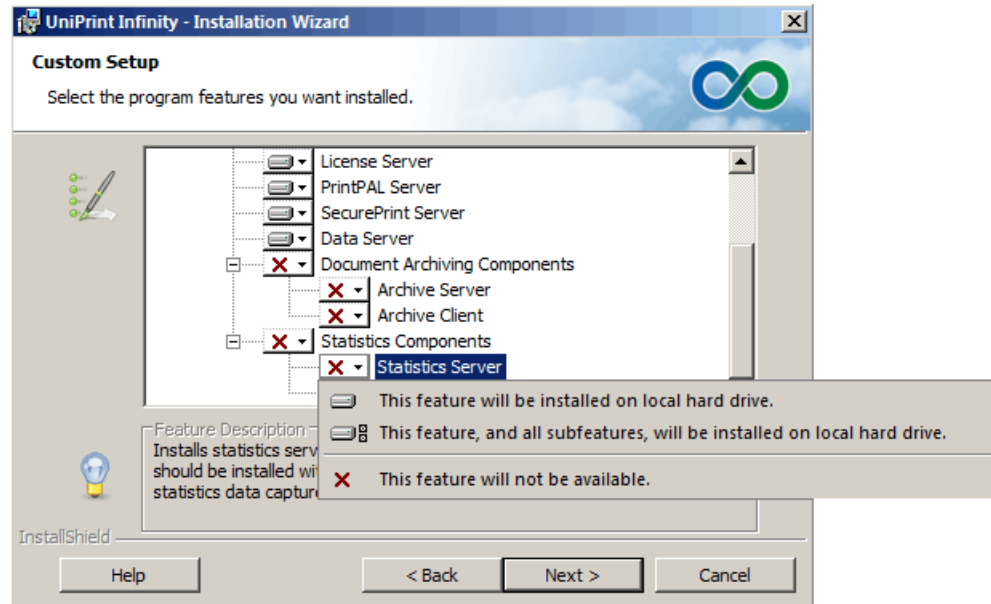
5. In the **Destination Folder** dialog box, click **Next** to accept the default location for the UniPrint program files. To select a different location, click **Change** and then browse to the alternate location.



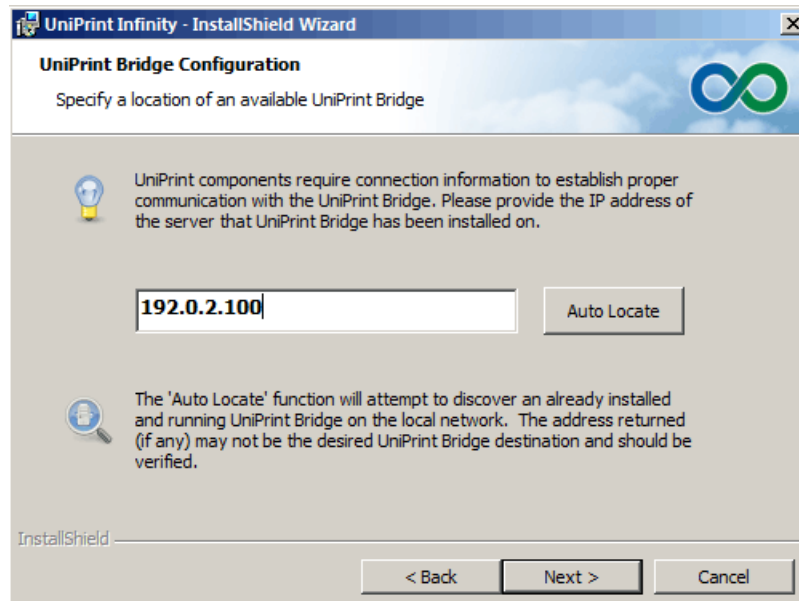
6. In the **Setup Configuration Type** dialog box, select **Show me all available installation customization options** and then click **Next**.



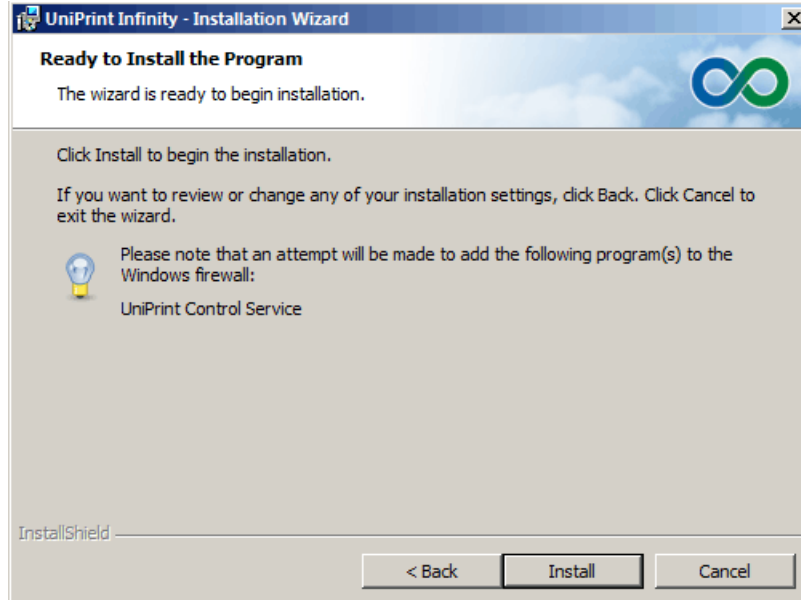
7. In the **Custom Setup** dialog box, expand **Statistics Components**. Beside **Statistics Server**, click  and then select **This feature will be installed on local hard drive**. Click **Next**.



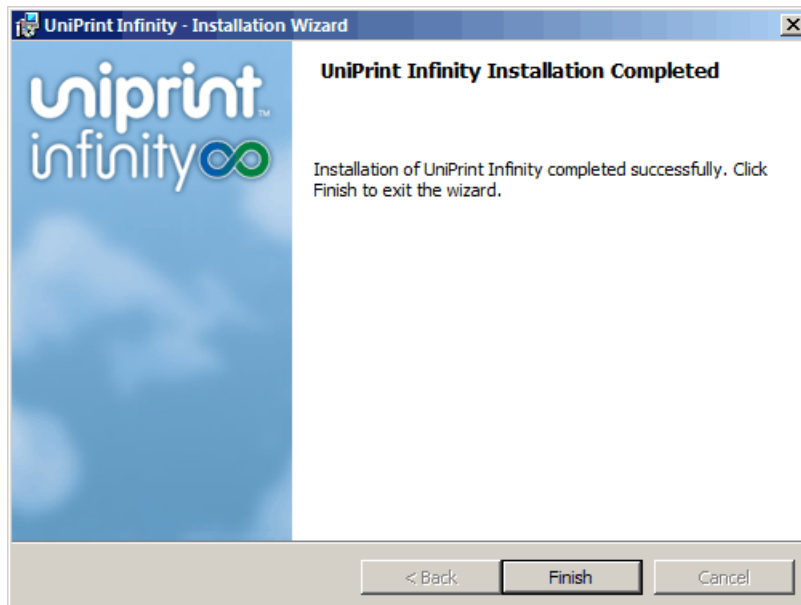
8. In the **UniPrint Bridge Configuration** dialog box, enter the **IP Address** of the License Server (typically the UniPrint Bridge) or click **Auto Locate** to run an auto-discovery function to find an already installed and running License Server. *NOTE: If using the **Auto Locate** function in an environment where there are multiple UniPrint Bridges, ensure that the IP address located is that of the intended License Server before proceeding.* Click **Next** to continue.



9. In the **Ready to Install the Program** dialog box, click **Install**. UniPrint installer will copy files to the destination folder.



10. Click **Finish** to complete the installation.



Installing UniPrint from the Command Line

Command line installation is available for UniPrint81_*.msi with the following options.



NOTE: If UAC is enabled, msixec.exe must be run as an administrator. To run a command line as an administrator do the following:

1. Click **Start** and then click **All Programs**. Click **Accessories**.
2. Right-click **Command Prompt** and select **Run as administrator**.

Syntax

UniPrint Bridge	<pre>msiexec /q /i c:\UniPrint81_*.msi ADDLOCAL=Bridge,[License_Server],[SecurePrint_Server] [INSTALLDIR = "path"]</pre>
UniPrint Print Server	<pre>msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=Print_Server, [SecurePrint_Components],[Archive_Client],[Statistics_Client] [INSTALLDIR = "path"] [UP_SETTING_BRIDGEIP=nnn.nnn.nnn.nnn:ppppp] [UP_SETTING_STAT_CLIENT_PORT=#ppppp]</pre>
UniPrint Application Server	<pre>msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=App_Server,[PrintPAL_Client],[Adobe_Plugin],[Arch ve_Client],[Statistics_Client] [INSTALLDIR= "path"] [UP_SETTING_RUN_PRINTPAL=#{0 1}] [UP_SETTING_BRIDGEIP=nnn.nnn.nnn.nnn:ppppp] [UP_SETTING_PAPERSIZE=#n] [UP_SETTING_UNIPRINT_AS_DEFAULT=#{0 1}] [UP_SETTING_GPO={M U S D}] [UP_SETTING_LOGLEVEL=n] [UP_SETTING_PASSTHROUGH=#n] [UP_SETTING_NO_UNIPRINT_PRINTER=#{0 1}] [UP_SETTING_NO_SAVE_QUEUE=#{0 1}] [UP_SETTING_STAT_CLIENT_PORT=#ppppp] [UP_SETTING_VC_ORDER] = {t c d m}</pre>
Archive Server	<pre>msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=Archive_Server [INSTALLDIR="path"] [UP_SETTING_ARCHIVE_SERVICE_PORT=ppppp]</pre>
Statistics Server	<pre>msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=Statistics_Server [INSTALLDIR="path"] [UP_SETTING_STAT_SERVICE_PORT=#ppppp]</pre>

]



NOTE: A comma (,) is required between each ADDLOCAL component and a space is required between each setting. Also note that some, but not all, parameters require the number sign (#) before the parameter value.

Command Line Options

/q **Function:** Runs the Setup in silent mode (no user intervention required).

Remarks: Must be used with the /i Windows Installer parameter. If no additional parameters are passed, default values will be used.

Example: `msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=Bridge`

ADDLOCAL= component

Function: Specifies which UniPrint component to install on the local server.

Remarks: Separate multiple components with a comma only and each component is case sensitive. If no additional parameters are passed, default values will be used.

Component	Description
Bridge	Installs the UniPrint Bridge components.
PrintPAL_Server	Installs the PrintPAL Server on the UniPrint Bridge.
SecurePrint_Server	Installs the SecurePrint Server components on the UniPrint Bridge.
Print_Server	Installs the UniPrint Print Server components.
SecurePrint_Components	Installs the SecurePrint components on the UniPrint Print Server.
App_Server	Installs the UniPrint Application Server components on the terminal server.
PrintPAL_Client	Installs the PrintPAL Client on the UniPrint Application Server.
Archive_Client	Installs the Archive Client on either the UniPrint Print Server to archive Gateway printer queue print jobs or the UniPrint Application Server to archive UniPrint printer queue print jobs.

Component	Description
Statistics_Client	Installs the Statistics Client on either the UniPrint Print Server to capture Gateway printer queue statistics and/or the UniPrint Application Server to capture UniPrint printer queue statistics.
Adobe_Plugin	Installs the Adobe Plug-in on the UniPrint Application Server.
Archive_Server	Installs the Archive Server components.
Statistics_Server	Installs the Statistics Server components.

Example: `msiexec /q /i C:\UniPrint81_*.msi
ADDLOCAL=Bridge,PrintPAL_Server,SecurePrint_Server`

INSTALLDIR **Function:** Specifies a custom installation path for the UniPrint program files.
Remarks: The full path specified must be enclosed in double quotation marks (“ ”) if spaces exist in the path.

Example: `msiexec /q /i C:\UniPrint81_*.msi
ADDLOCAL=Bridge,License_Server,SecurePrint_Server
INSTALLDIR="C:\Program Files\UniPrint\Bridge"`

UP_SETTING_BRIDGEIP **Function:** Specifies the IP Address and port number of the UniPrint Bridge and/or license server.

Remarks: This parameter is only required during the UniPrint Print Server and UniPrint Application Server installation process. The IP address and the port number are both required. To specify the UniPrint Bridge with the default port number, 999, just type in the IP address with the colon (:) and the port number 999.

Example: `msiexec /q /i C:\UniPrint81_*.msi
ADDLOCAL=Print_Server,SecurePrint_Components
UP_SETTING_BRIDGEIP=192.0.2.100:999`

UP_SETTING_RUN_PRINTPAL **Function:** Enables or disables the **Run PrintPAL on this server** option under **Logon options** in the **Sessions** screen of the UniPrint Management Console on the application server. This specifies whether or not to run the PrintPAL Client on this server. This is only available on the application server.
Remarks: The PrintPAL_Client must be specified in the command line first. If enabled, the PrintPAL Client will automatically launch when a session is started. Default is 0 (Disabled).
Example: `msiexec /q /i C:\UniPrint81_*.msi
ADDLOCAL=App_Server,PrintPAL_Client
UP_SETTING_RUN_PRINTPAL=#1`

- UP_SETTING_PAPERSIZE=#n** **Function:** Specifies the default paper size for the UniPrint printer, UniPrint (Email PDF) and UniPrint (Save PDF) queues.
Remarks: Alternatively, this option can be set through the UniPrint Management Console on the UniPrint Application Server after installation is complete. The more common paper sizes are listed below.
- | n | Description |
|---|----------------------|
| 1 | Letter (8.5 x 11 in) |
| 5 | Legal (8.5 x 14 in) |
| 8 | A3 (297 x 420 mm) |
| 9 | A4 (210 x 297 mm) |
- Example:** `msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=App_Server UP_SETTING_PAPERSIZE=#9`
- UP_SETTING_UNIPRINT_AS_DEFAULT** **Function:** Sets UniPrint as the default printer for all users when set to 1.
Remarks: Alternatively, this option can be set through the UniPrint Management Console on the UniPrint Application Server after installation is complete. Default is 1.
Example: `msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=App_Server #UP_SETTING_UNIPRINT_AS_DEFAULT=#0`
- UP_SETTING_GPO** **Function:** Specifies the order in which UniPrint applies settings from Active Directory Group Policy Objects.
Remarks: If a source is not specified, configurations from that source will not be applied. Do not use a comma or space between sources. The default order is UMD.
- | | |
|---|------------------------|
| U | User Policy |
| M | Machine Policy |
| S | User Settings |
| D | Local Machine Settings |
- Example:** `msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=App_Server UP_SETTING_GPO=MUD`
- UP_SETTING_LOGLEVEL=n** **Function:** Specifies the debugging log level for troubleshooting purposes.
Remarks: Alternatively, this option can be set through the UniPrint Management Console on the UniPrint Application Server after installation is complete. The default level is 1.
- | n | Description |
|---|--------------|
| 0 | None |
| 1 | Errors |
| 2 | Info |
| 3 | Debug (Full) |
- Example:** `msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=App_Server UP_SETTING_LOGLEVEL=3`

**UP_SETTING_
PASSTHROUGH
=#n****Function:** Disables or enables UniPrint pass-through.**Remarks:** If enabled, UniPrint will treat this application server as a pass-through client, routing print jobs printed from another application server that also has UniPrint Application Server installed.**n Description**

- 1 RDP connections only
- 2 Legacy ICA (9.x and earlier) connections
- 3 RDP and Legacy ICA (9.x and earlier) connections
- 4 ICA 10.x and later connections only
- 5 RDP and ICA 10.x and later connections
- 6 Legacy ICA (9.x and earlier) and ICA 10.x and later connections
- 7 RDP, Legacy ICA (9.x and earlier), and ICA 10.x and later connections

Example: `msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=App_Server
UP_SETTING_PASSTHROUGH=#5`**UP_SETTING_
NO_UNIPRINT_
PRINTER****Function:** Does not create the UniPrint printer queue when set to 1.**Remarks:** This is recommended for SecurePrint implementations and is only applicable to the UniPrint Application Server. To recreate the UniPrint queue change the OmitCreation value under registry key, HKEY_LOCAL_MACHINE\SOFTWARE\UniPrint\Control Service\Plugins\PRNINSTL\Printers\UniPrint to 0. The default is 0.**Example:** `msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=App_Server
UP_SETTING_NO_UNIPRINT_PRINTER=#1`**UP_SETTING_
NO_SAVE_QUEUE****Function:** Does not create the UniPrint (Save PDF) queue when set to 1.**Remarks:** This only applies to the UniPrint Application Server. To recreate the UniPrint (Save PDF) queue change the OmitCreation value under registry key, HKEY_LOCAL_MACHINE\SOFTWARE\UniPrint\Control Service\Plugins\PRNINSTL\Printers\UniPrint (Save PDF) to 0. The default is 0.**Example:** `msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=App_Server
UP_SETTING_NO_SAVE_QUEUE=#1`**UP_SETTING_
VC_ORDER****Function:** Sets the virtual channel order of detection in a session.**Remarks:** This only applies to the UniPrint Application Server and can be later changed using the UniPrint Management Console.

- t RDP
- c ICA Virtual Channel
- d Client drive mapping
- m Mac client

Example: `msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=App_Server
UP_SETTING_VC_ORDER=tcdm`

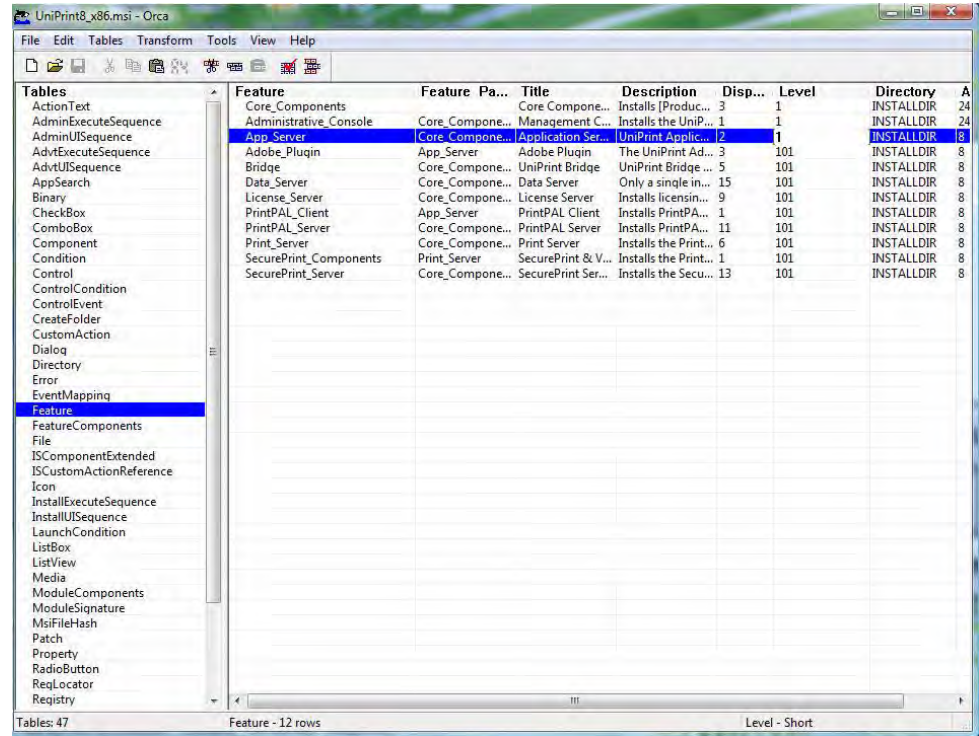
UP_SETTING_ ARCHIVE_ SERVICE_PORT	<p>Function: Sets the port number that the Archive Service is listening on.</p> <p>Remarks: This only applies to the Archive Server. To change the port number manually, change the ConnectionPort value under registry key, HKEY_LOCAL_MACHINE\SOFTWARE\UniPrint\Archive Service. The default is 10401.</p> <p>Example: <code>msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=Archive_Server UP_SETTING_ARCHIVE_SERVICE_PORT=12345</code></p>
UP_SETTING_ STAT_SERVICE_ PORT	<p>Function: Sets the port number that the Statistics Service is listening on.</p> <p>Remarks: This only applies to the Statistics Server. To change the port number manually, change the ConnectionPort value under registry key, HKEY_LOCAL_MACHINE\SOFTWARE\UniPrint\Statistics Service. The default is 10308.</p> <p>Example: <code>msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=Statistics_Server UP_SETTING_STAT_SERVICE_PORT=#12345</code></p>
UP_SETTING_ STAT_CLIENT_ PORT	<p>Function: Sets the port number that the Statistics Client Service is listening on.</p> <p>Remarks: This only applies to the Statistics Client. To change the port number manually, change the ConnectionPort value under registry key, HKEY_LOCAL_MACHINE\SOFTWARE\UniPrint\Statistics Client Service. The default is 10309.</p> <p>Example: <code>msiexec /q /i C:\UniPrint81_*.msi ADDLOCAL=Statistics_Client UP_SETTING_STAT_CLIENT_PORT=#12345</code></p>

Using Group Policy to Deploy UniPrint Remotely

The following instructions are based on Windows Server 2008 and assume that both a Group Policy Object and distribution point that is accessible by the domain controller, UniPrint Bridge, UniPrint Print Server, UniPrint Application Server, and virtual desktop images, on which you wish to have UniPrint components installed, have been created.

Standard transform (.MST) files are included in the UniPrint installation package and are located in \\Admin\Transforms. For custom installations, a

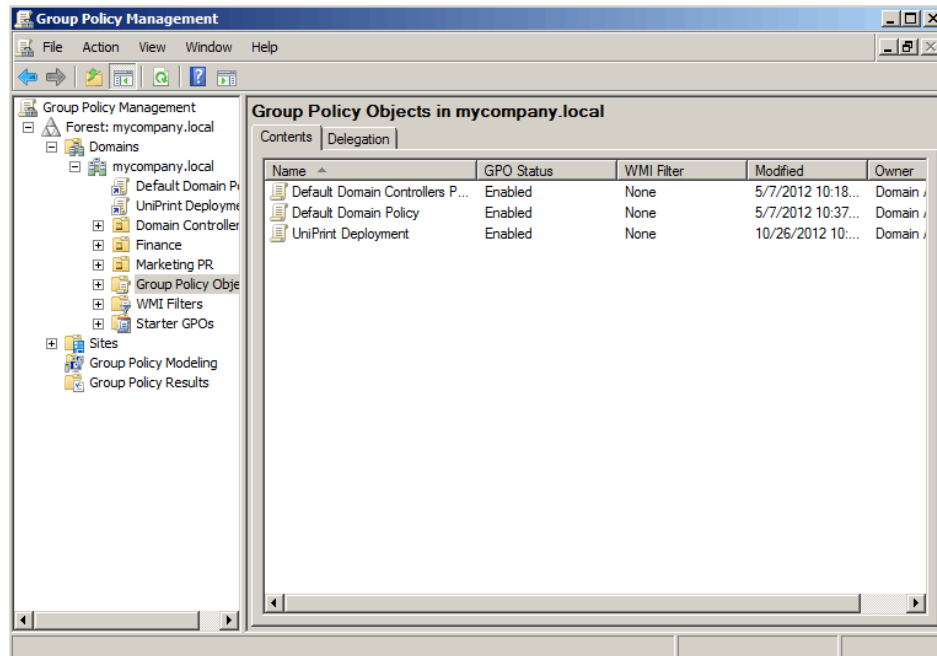
new transform file can be created with Orca by setting the features **Level** to **1**.



To deploy UniPrint81_*.msi through Group Policy Management, do the following for each UniPrint component:

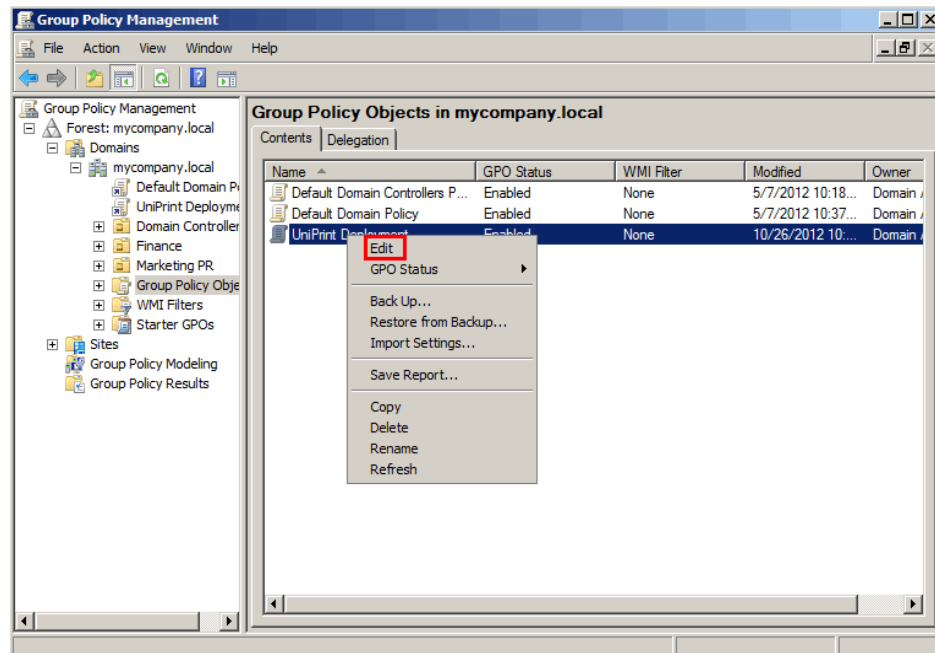
1. From your domain controller, click **Start**, point to **Administration Tools** and then click **Group Policy Management**.

2. Expand the domain containing the server devices and virtual desktop images to which you want to deploy UniPrint and then click **Group Policy Objects**.

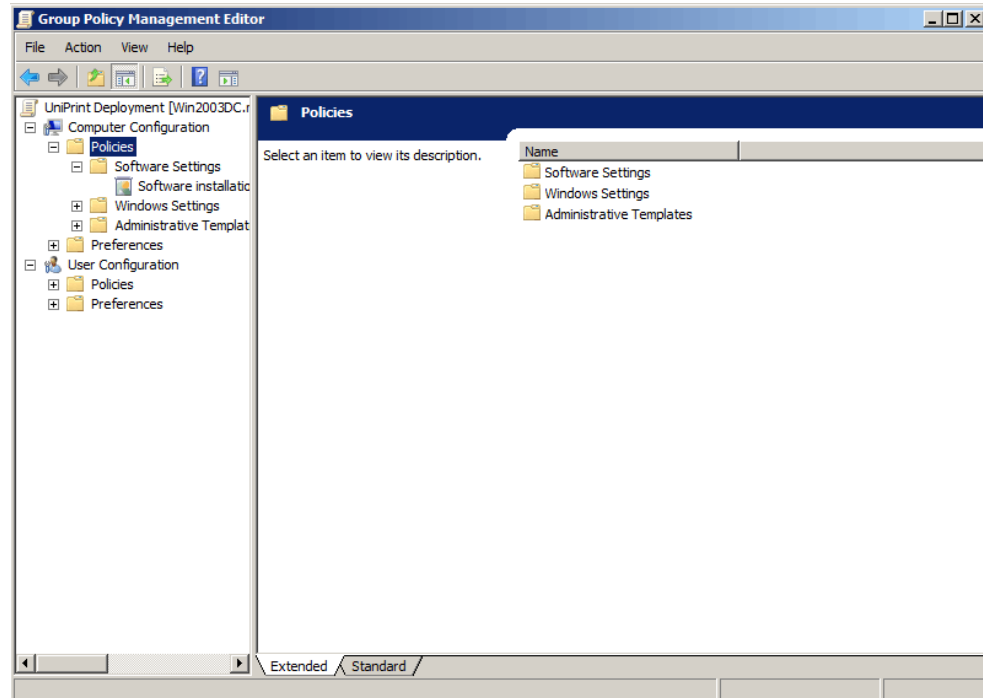


NOTE: Applying this software installation policy at the domain level will result in UniPrint being deployed to all devices with Windows 2003 or later, including client devices.

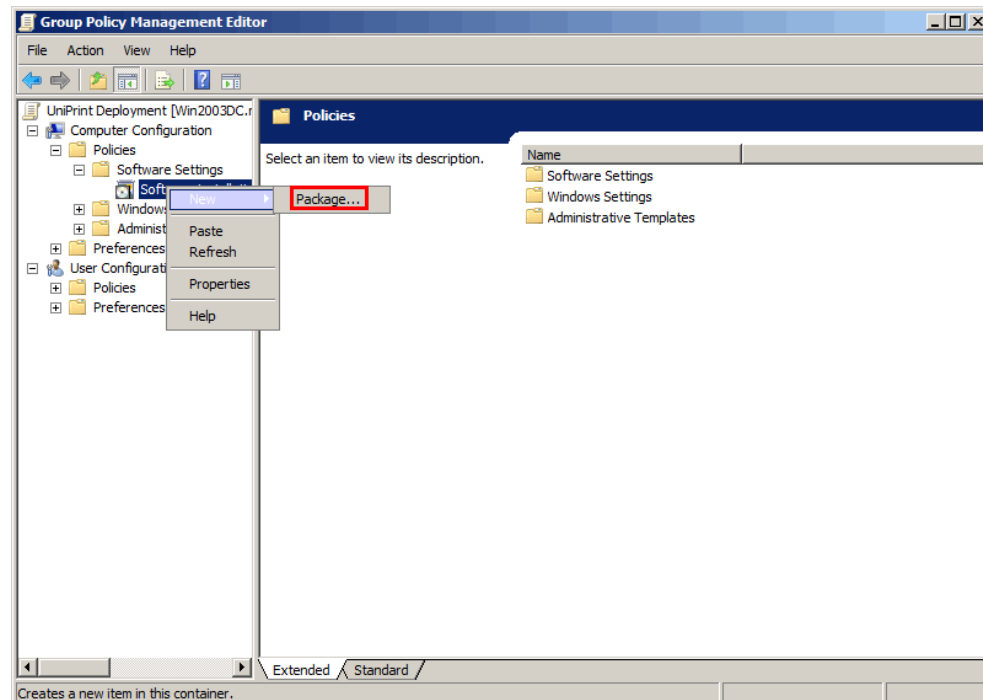
3. Right-click the group policy object that you want to use to deploy UniPrint, and then select **Edit**.



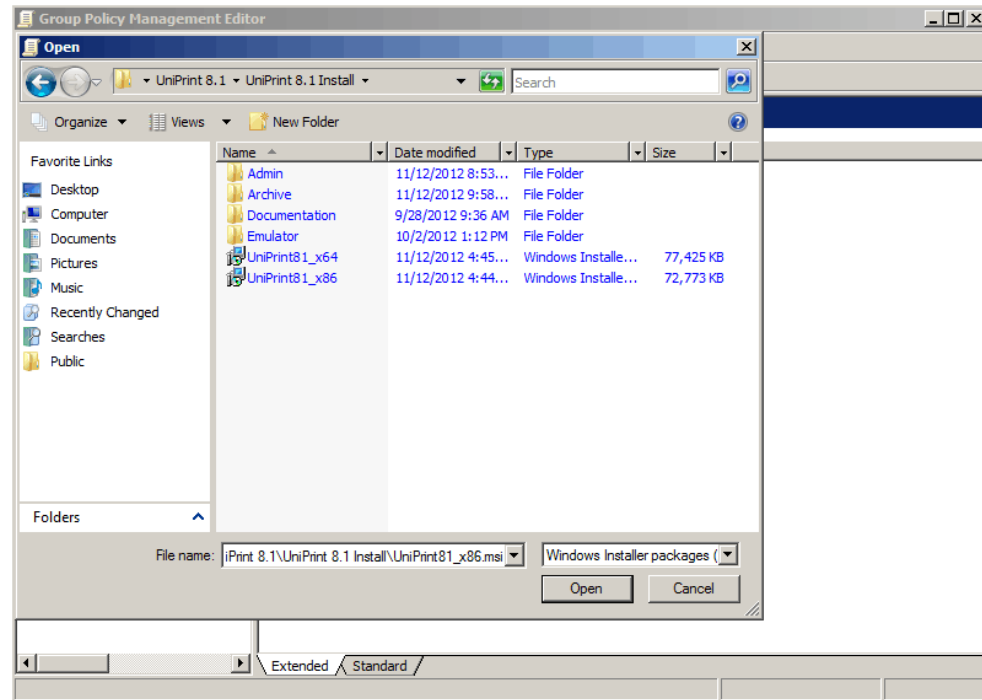
- Under **Computer Configuration**, expand **Policies** and then **Software Settings**.



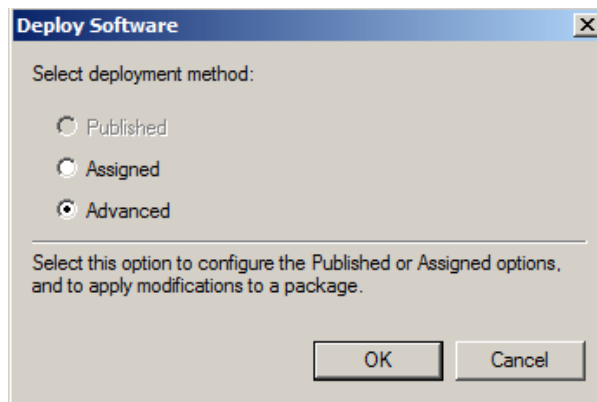
- Right-click **Software Installation**, point to **New**, and then click **Package...**.



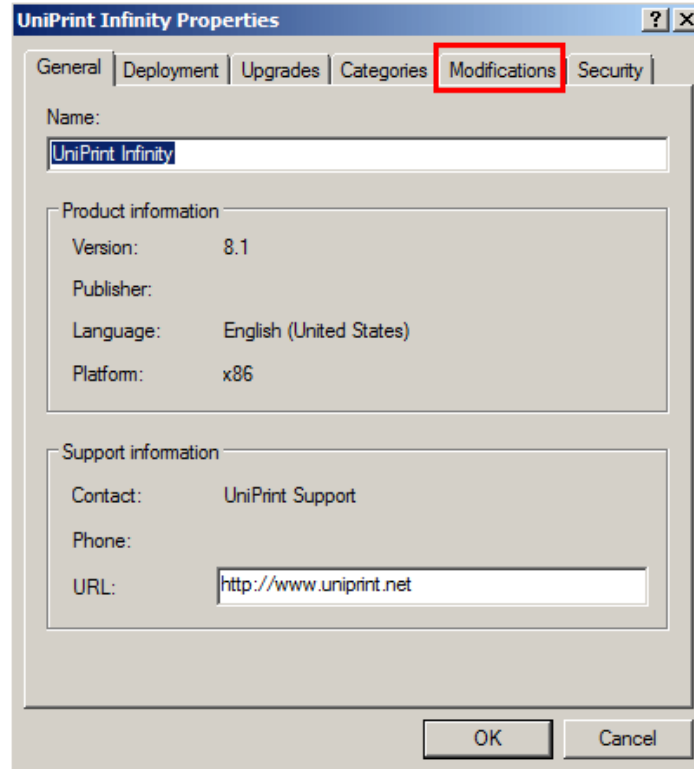
6. In the **Open** dialog box, type the full Universal Naming Convention (UNC) path of the UniPrint81_*.msi package, for example, \\file_server\share\UniPrint81_*.msi. Click **Open**.



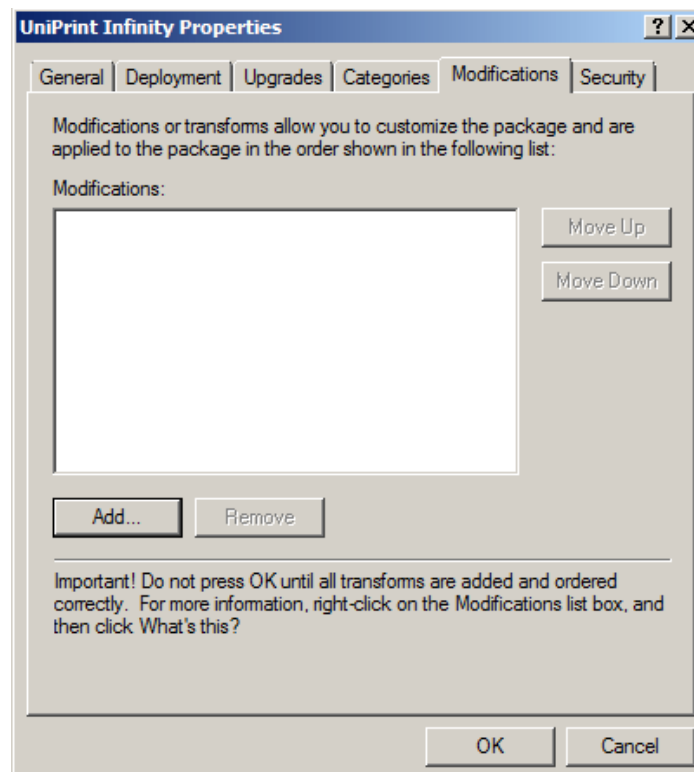
7. In the **Deploy Software** dialog box, select **Advanced**, and then click **OK**.



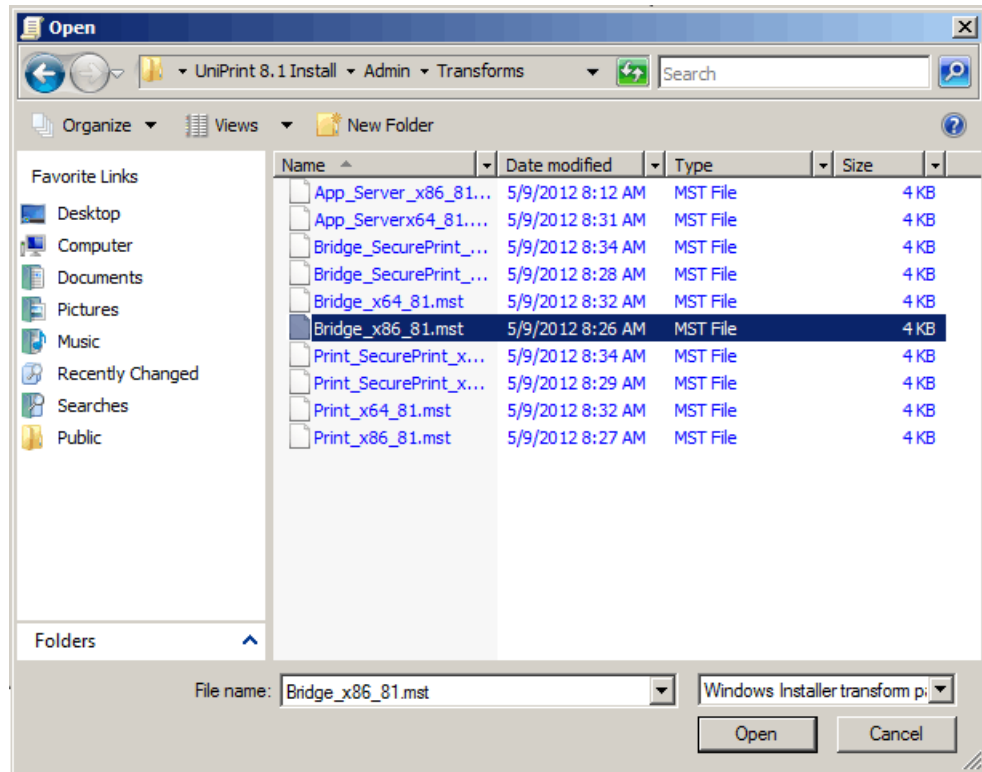
8. In the **UniPrint Infinity Properties** dialog box, click the **Modifications** tab.



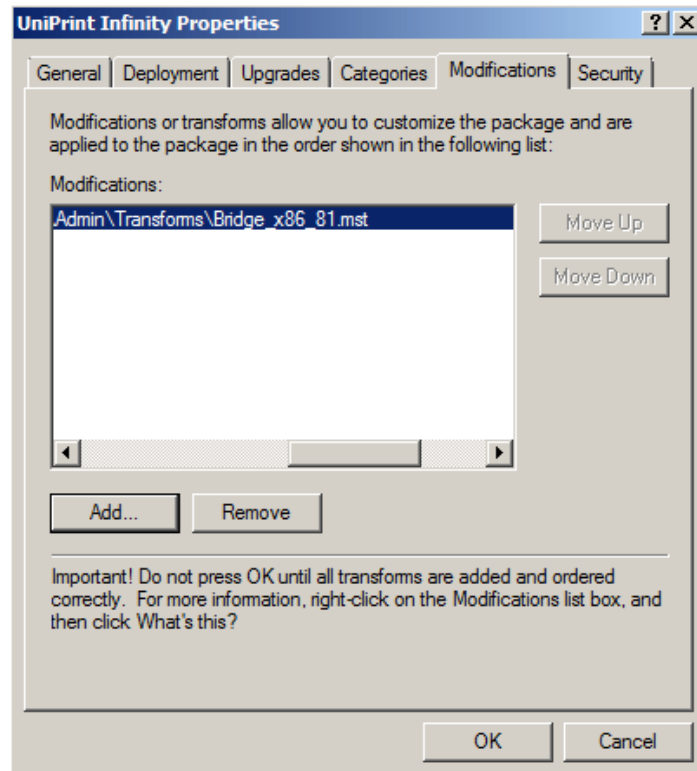
9. Click **Add** to add the transform file.



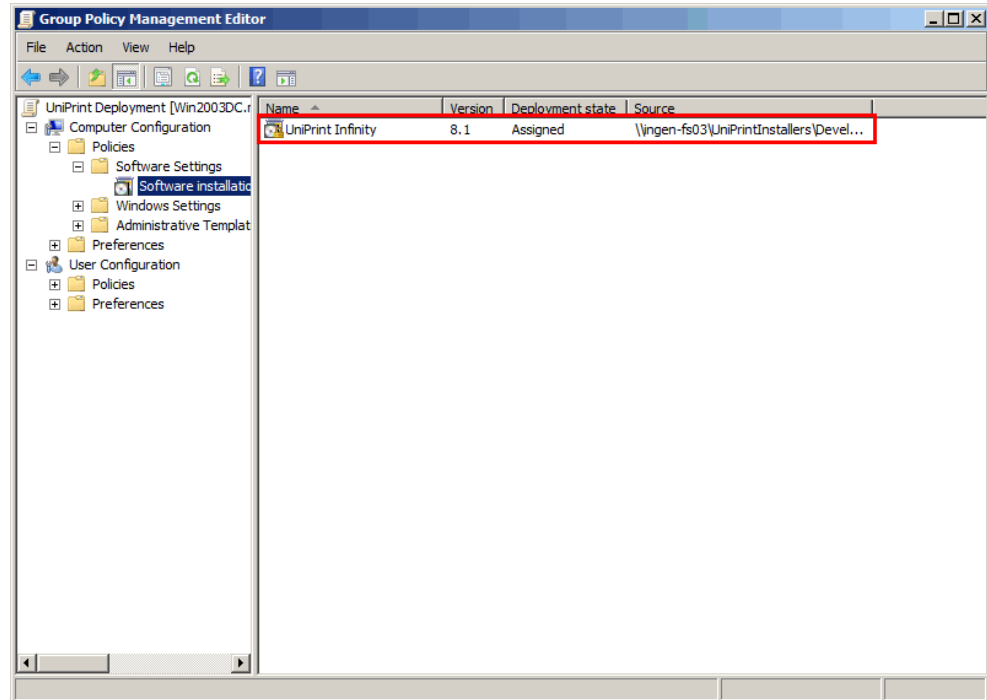
10. Click to select the desired transform (.mst) file and then click **Open**.



11. Click **OK**.



12. UniPrint will now appear in the right pane of the **Group Policy** window.



13. Close the Group Policy Management Editor and then close the Group Policy Management snap-in.

Removing UniPrint

Before proceeding ensure that *all user sessions have ended*, and that new logons to the application server or virtual desktop image have been disabled. Removing UniPrint components *requires that the server be restarted* to release files locked by the operating system.

To remove UniPrint completely from your environment, the following procedure must be performed on all UniPrint component servers.

1. Click **Start** and then click **Control Panel**.
2. Click **Programs and Features**.
3. From the list of installed applications, click to select **UniPrint Infinity** and then click **Uninstall**.
4. Click **Yes** to confirm that you want to remove UniPrint Infinity.
5. Click **OK** and then restart the server.

Configuring UniPrint Bridge

Most of the configuration for UniPrint is done through the UniPrint Management Console. Although most settings can be changed from any UniPrint component, initial configuration should be performed from the suggested component.

On the UniPrint Bridge, administrators have the ability to change the default Gateway printer properties, delete or pause an available Gateway printer and create new FTP printer instances. This is also where you would initially configure PrintPAL and SecurePrint.

Since the License Server component cannot be installed without the UniPrint Bridge component, obtaining and then applying a license to the License Server also falls under this server.

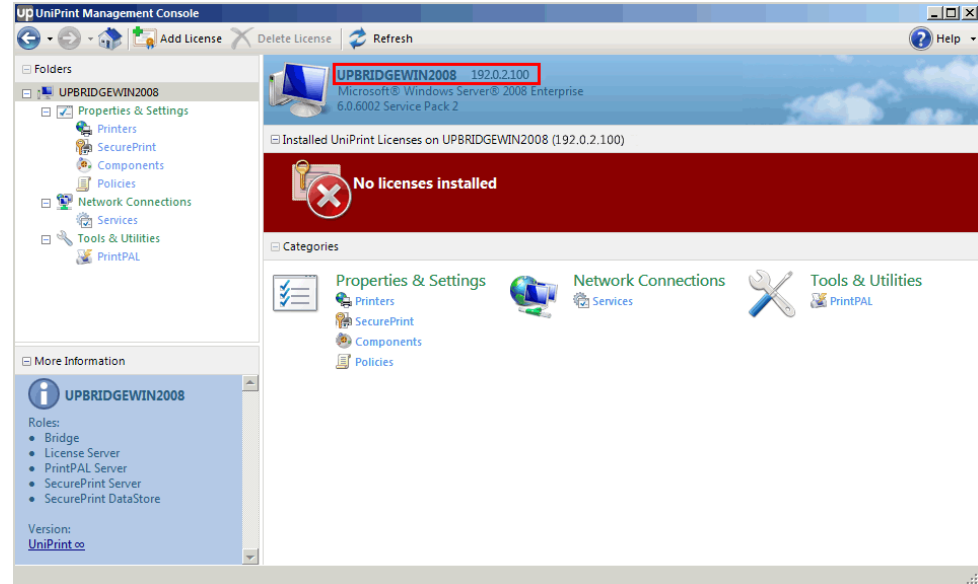
Obtaining and Applying a UniPrint License

A license file is required for UniPrint to produce print jobs without a watermark printed across each page. This file is a registry file that needs to be imported to the UniPrint Bridge that is also the designated license server.

Obtaining a UniPrint License

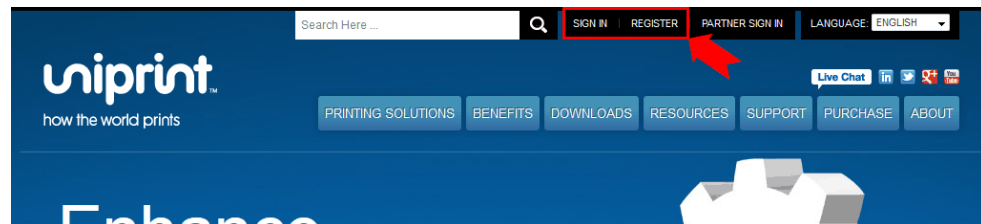
1. Log on to the UniPrint Bridge machine that has the license server component installed.
2. Click **Start**, point to **All Programs**, click **UniPrint Suite** and then click **UniPrint Management Console**.

- The top banner displays the license server's information. Take note of the server's IP address and host name.

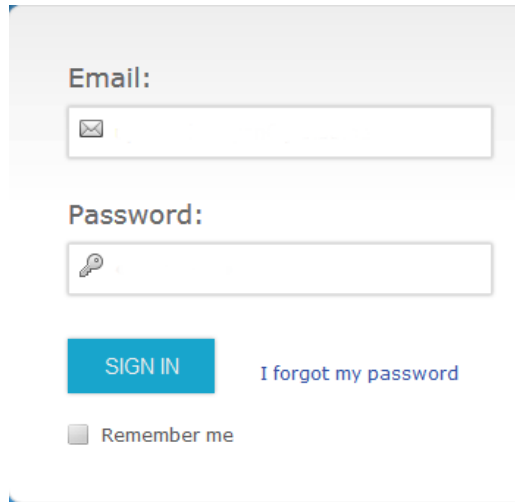


NOTE: In a dual NIC environment, UniPrint will detect the first NIC address reported.

- Go to the UniPrint Web site, www.uniprint.net. Click **SIGN IN**. If you are a new customer, click **REGISTER**. Complete the form and then click **REGISTER**.



5. For returning users, enter your credentials and then click **SIGN IN**.



The login form contains the following elements:

- Email:** A text input field with an envelope icon on the left.
- Password:** A text input field with a key icon on the left.
- SIGN IN:** A blue button.
- I forgot my password:** A blue link.
- Remember me:** A checkbox.

6. To add a license, click **Add License**. An e-mail with a unique serial number was sent when you purchased a UniPrint product.



Purchase Order: 1000

Qty	Order Items
1	UniPrint Infinity (UP-INF)
	100 Concurrent Sessions
	1 Year Support (UP-SUP-INF)
	614772102788-219759

Serial Number

Ordered by:
 Gil Grissom
 Pariah Reseller
 301 Front St
 Toronto, Ontario
 Canada, M5V 2T6

Ordered for:
 Jethro Gibbs
 Basement Boat Builders Guild
 1 Eva Rd, Suite P
 Toronto, Ontario
 Canada, M9C 6L6

Please register this serial number(s) at www.uniprint.net to receive the necessary license files.

For detailed instructions, refer to the licensing guide that corresponds with the product(s) you purchased.

For UniPrint Infinity: [License Installation](#)
 For UniPrint Suite 7.0: [Server](#), [TSE](#), [Gateway](#), [VDI Editions](#) [Host Edition](#)

7. Enter the Serial Number (from the e-mail), UniPrint Bridge **Server Name** and **Server IP Address** information.

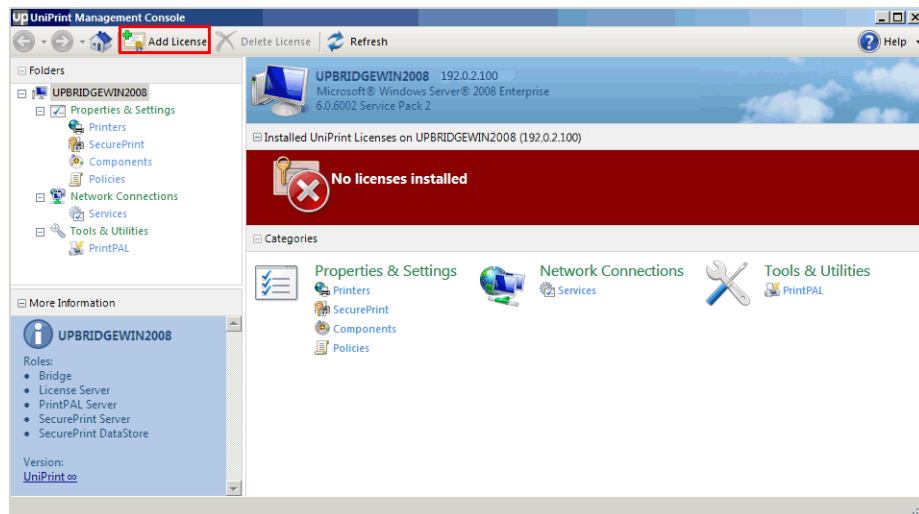
- Click **Add** and a license file will be sent to the e-mail address used for signing in.




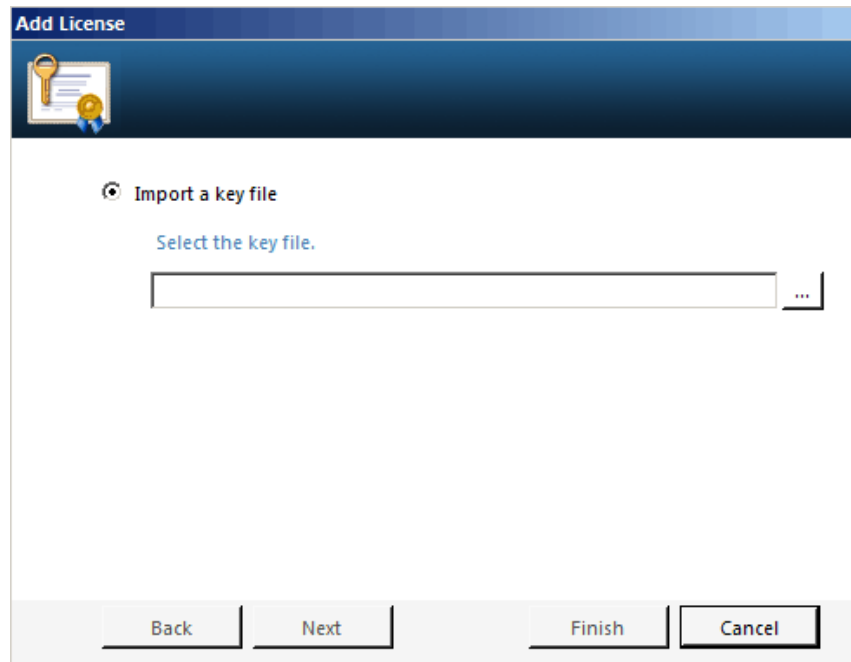
NOTE: The license file is sent electronically from support@uniprint.net. To ensure this message is received, verify that anti-spam filters are not blocking messages from this e-mail address.

Applying a UniPrint License

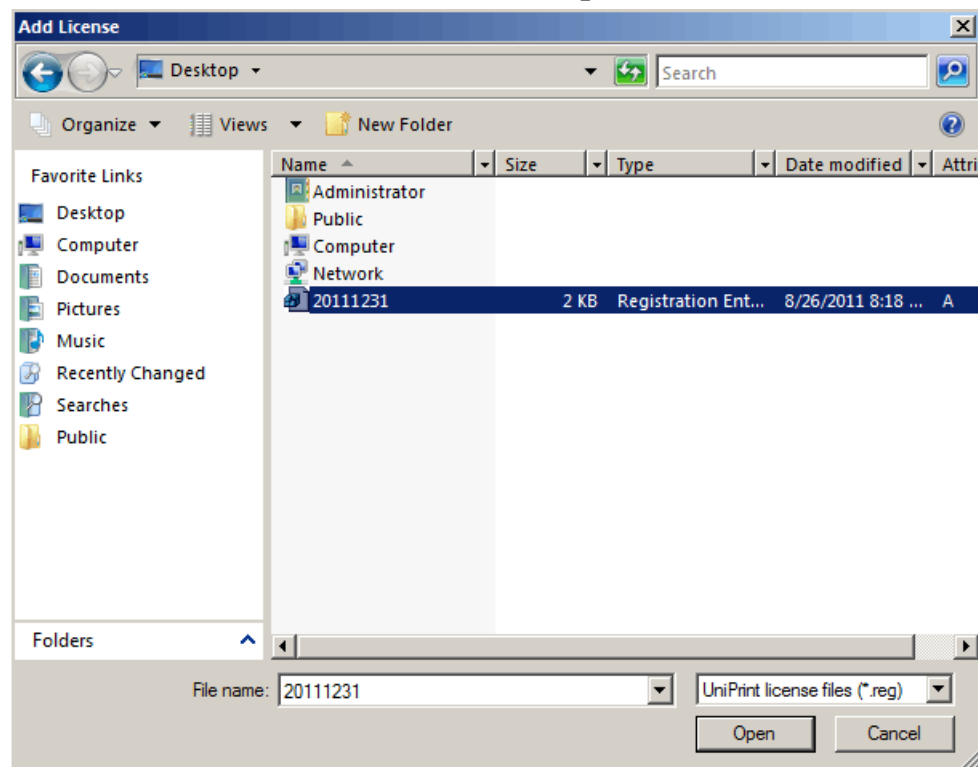
- On the UniPrint Bridge (License Server), click **Start**, point to **All Programs**, click **UniPrint Suite** and then click **UniPrint Management Console**.
- Click **Add License**.



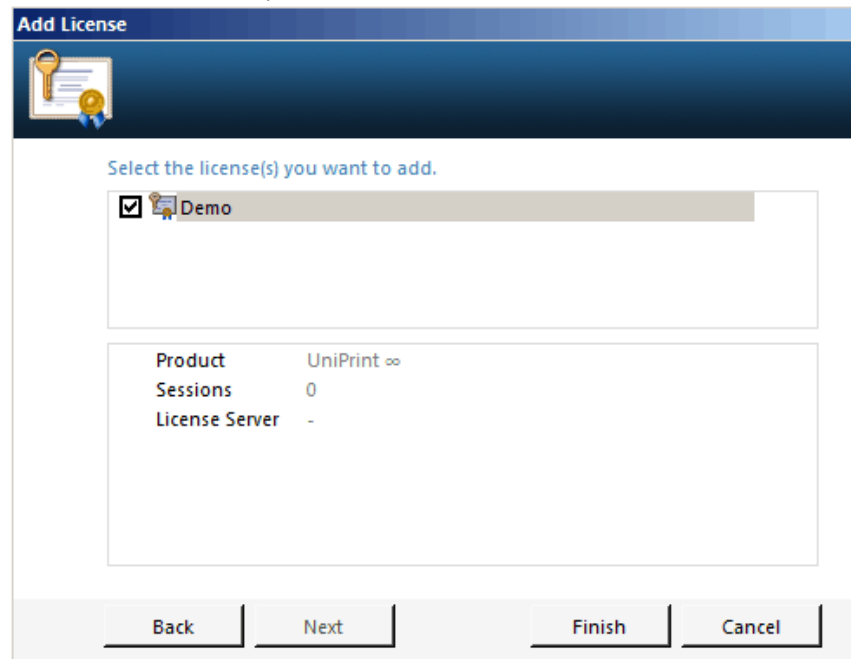
3. Click  to browse for the UniPrint License file (*.reg).



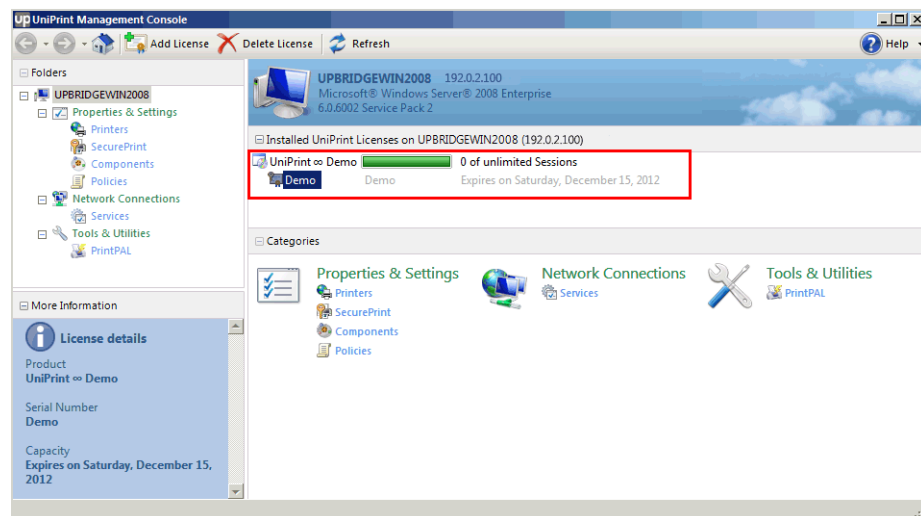
4. Click the license file and then click **Open**.



5. Select the license you want to add and then click **Finish**.



6. The license information should appear under the top banner.

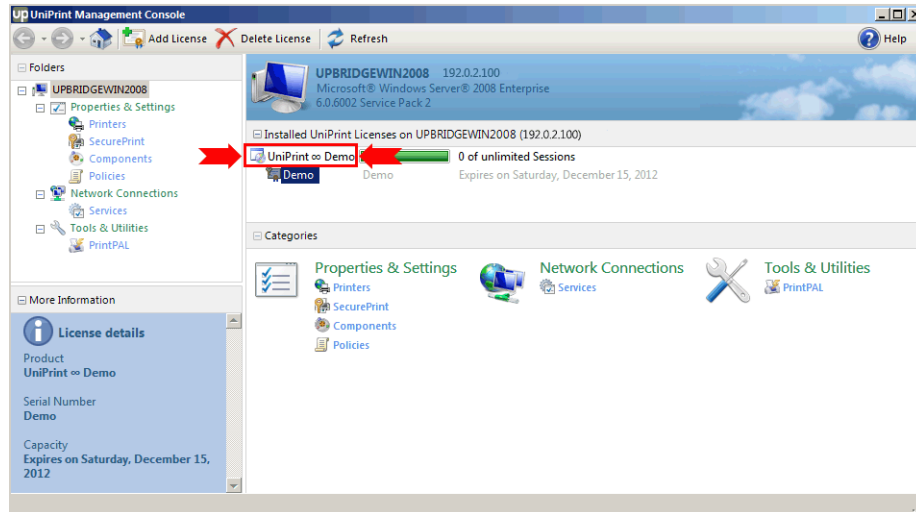


Viewing and Saving a Snapshot of License Usage

Viewing a Snapshot of License Usage

1. On the UniPrint Bridge (License Server), open the **UniPrint Management Console**.

- Under **Installed UniPrint Licenses on [Bridge]** ([Server IP Address]), double-click the license.



- A list of users, the license type, the application server they are logged onto and their session IDs will appear. **Note:** *This is only a snapshot. Users that log in afterwards will not be reflected in this view.*

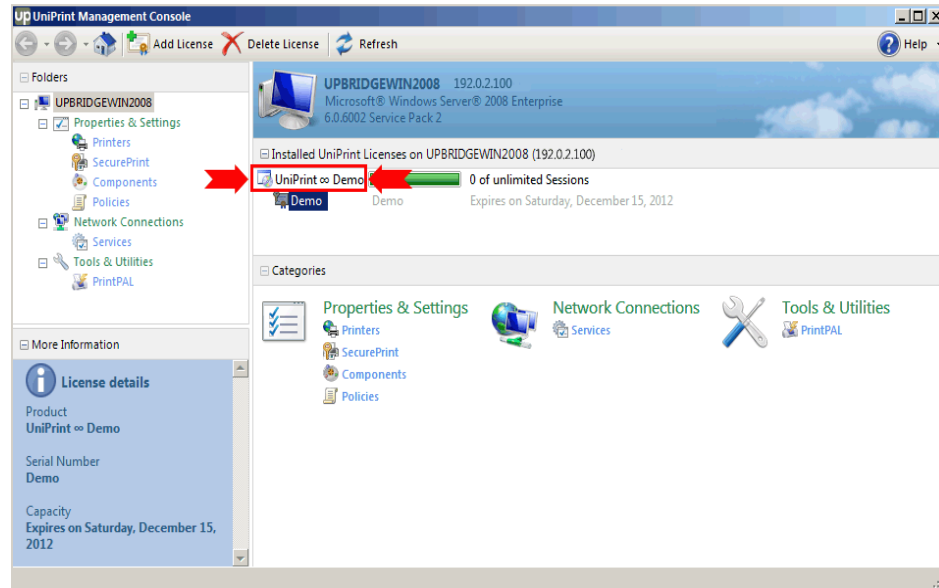
User	Type	Server	Session
DMorgan	UniPrint ∞	UPAPPWIN2008	3
JGibbs	UniPrint ∞	UPAPPWIN2008	2

Total: 2 Selected: 0

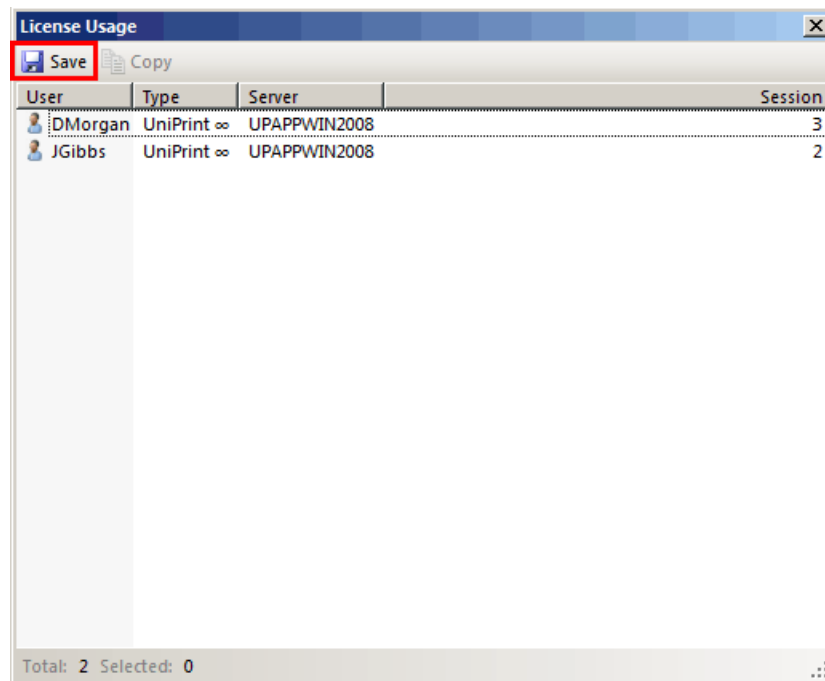
Saving a License Usage Snapshot To a File

- On the UniPrint Bridge (License Server), open the **UniPrint Management Console**.

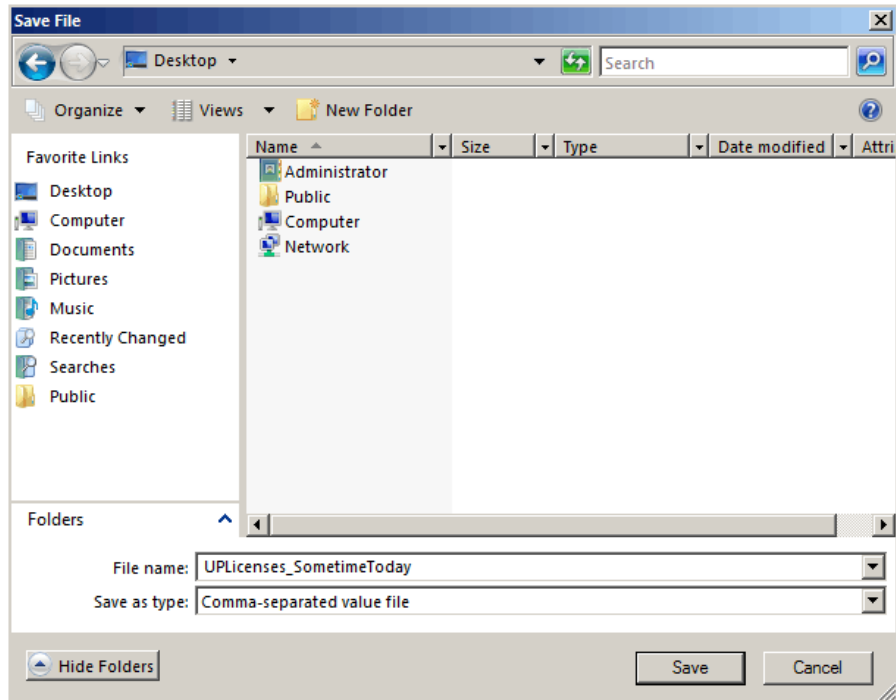
- Under **Installed UniPrint Licenses on [Bridge]** ([*Server IP Address*]), double-click the license.



- In the **License Usage** dialog box, click **Save**.



4. In the **Save File** dialog box, select a destination to save to and then type a file name. Click **Save**.



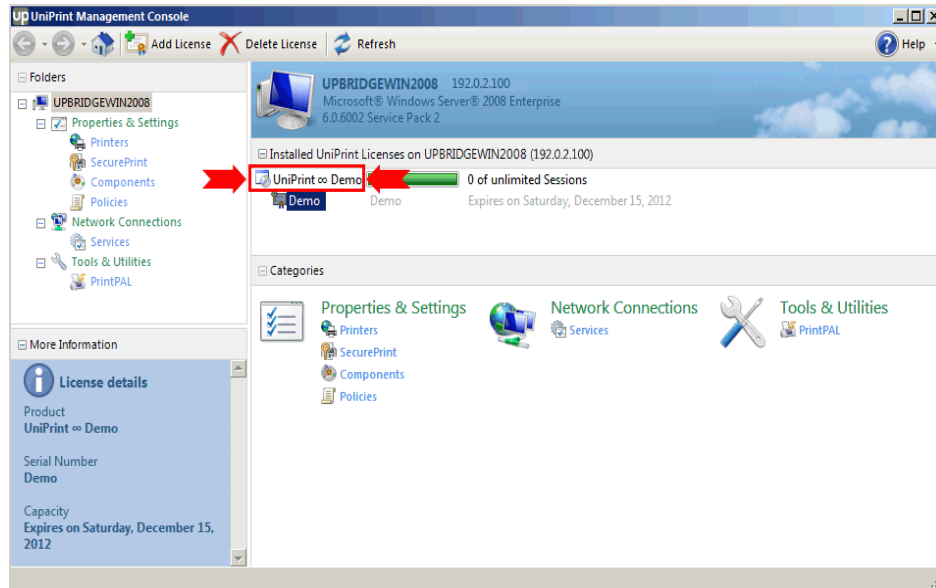
5. The file will be saved as a .CSV file. This file can be opened in Microsoft Excel.

	A	B	C	D	E	F	G
1	DMorgan	UniPrint â~z	UPAPPWIN2008	3			
2	JGibbs	UniPrint â~z	UPAPPWIN2008	2			
3							
4							
5							
6							
7							
8							
9							
10							

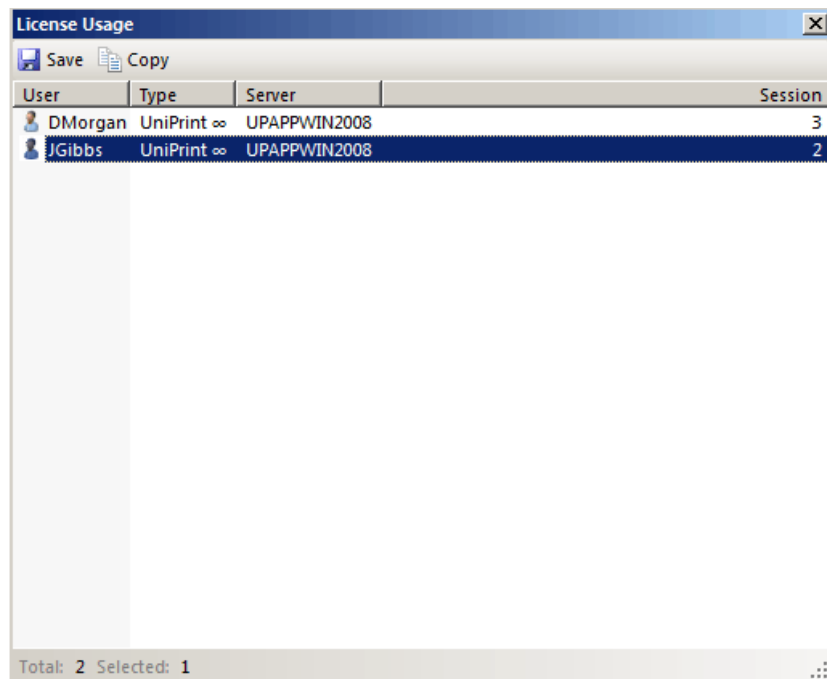
Copying a License Usage Snapshot to the Clipboard

1. On a UniPrint Bridge (License Server), open the **UniPrint Management Console**.

- Under **Installed UniPrint Licenses on [Bridge]** ([Server IP Address]), double-click the license.



- In the **License Usage** dialog box, click to select the entry to copy. To select multiple entries, hold down **CTRL** and then click an entry. For adjacent entries, hold down **SHIFT**, click the first entry and then click the last entry. Click **Copy**.



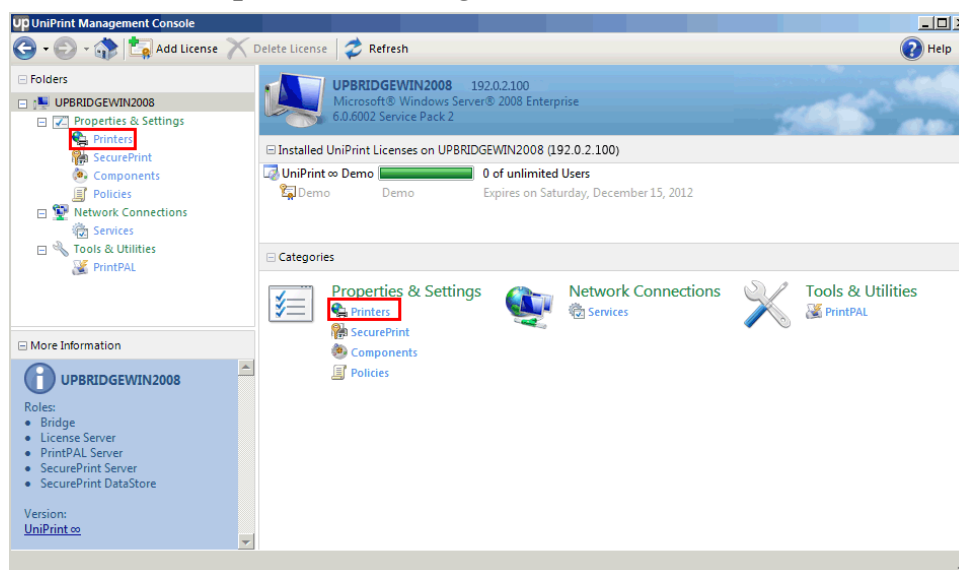
- This information can be pasted into Microsoft Excel or another preferred application.

Searching For A Particular Printer

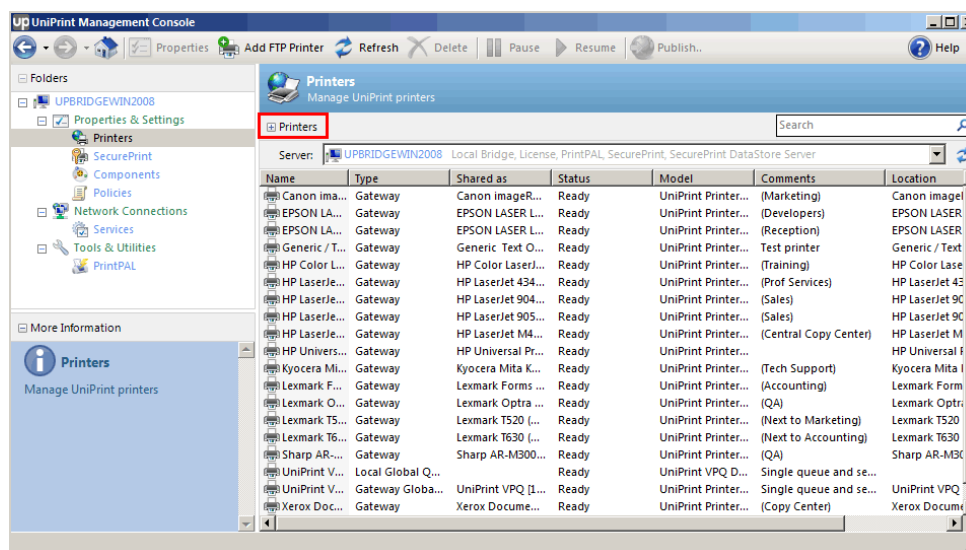
If the number of printers exceeds the space allotted on the screen, you may need to do a search or filter your printer list in order to configure them. The following instructions can also be applied to the UniPrint Print Server and UniPrint Application Server.

To search for a particular printer, do the following:

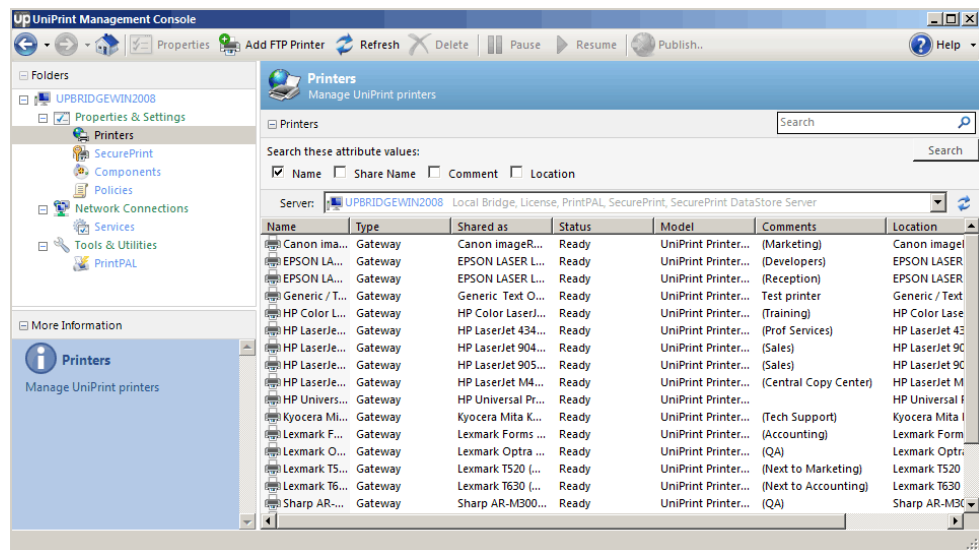
1. From any UniPrint component, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **Printers**.



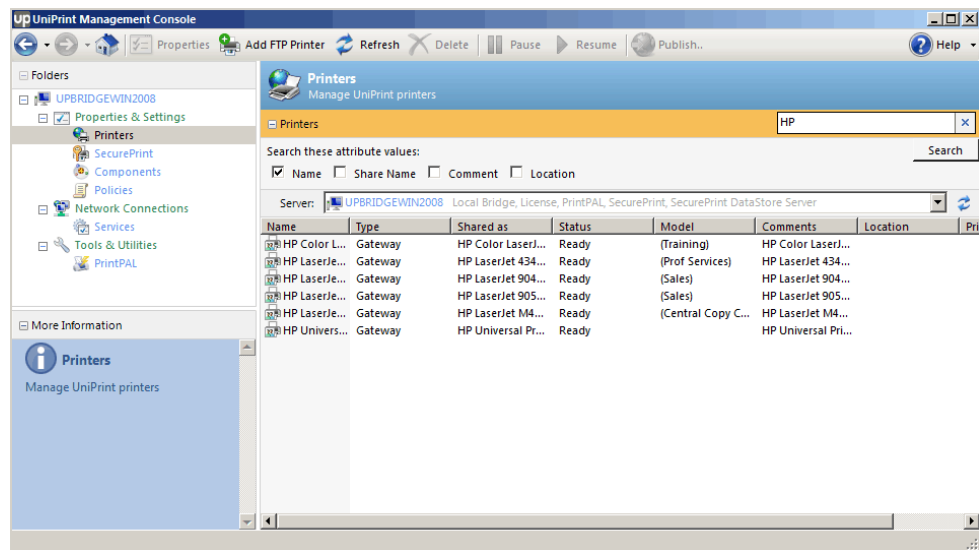
3. Click the plus sign beside **Printers**.



4. Select a filter attribute and then type in the **Search** box.



5. The printer list will be filtered as you type in the **Search** box and the printer bar will turn orange to indicate that a filter has been applied.

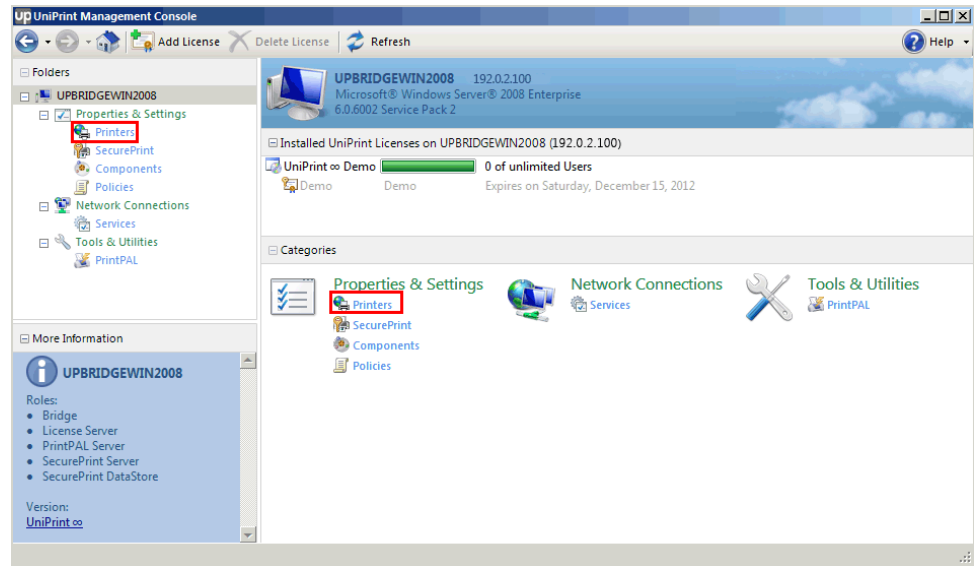


NOTE: To remove the filter, clear the **Search** box, select all filter attributes and then click **Refresh**.

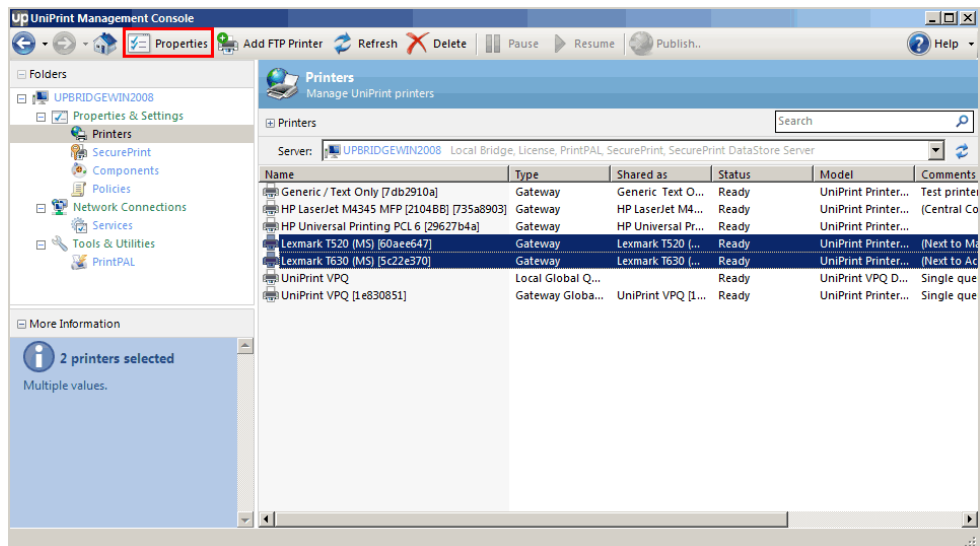
Changing Default Printer Properties for Gateway Printers Globally For All Users

From the UniPrint Bridge administrators can change the default configuration of a single or multiple Gateway printers for all users.

1. On the UniPrint Bridge, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **Printers**.

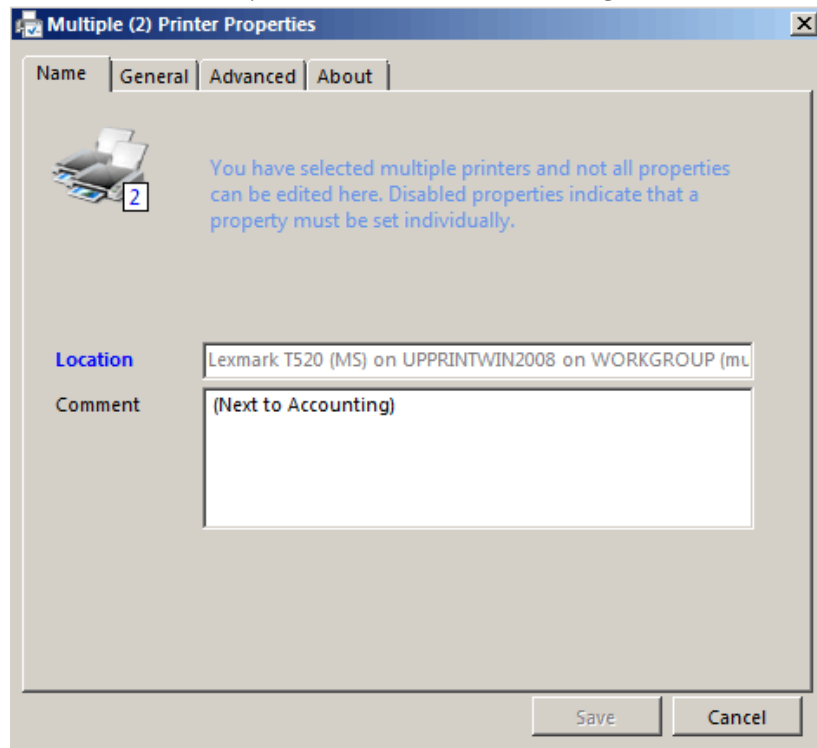


3. Click to select a printer or multiple printers from the details pane. Multiple printers can be selected by pressing **CTRL** and then clicking the desired printers.
4. Click **Properties**.



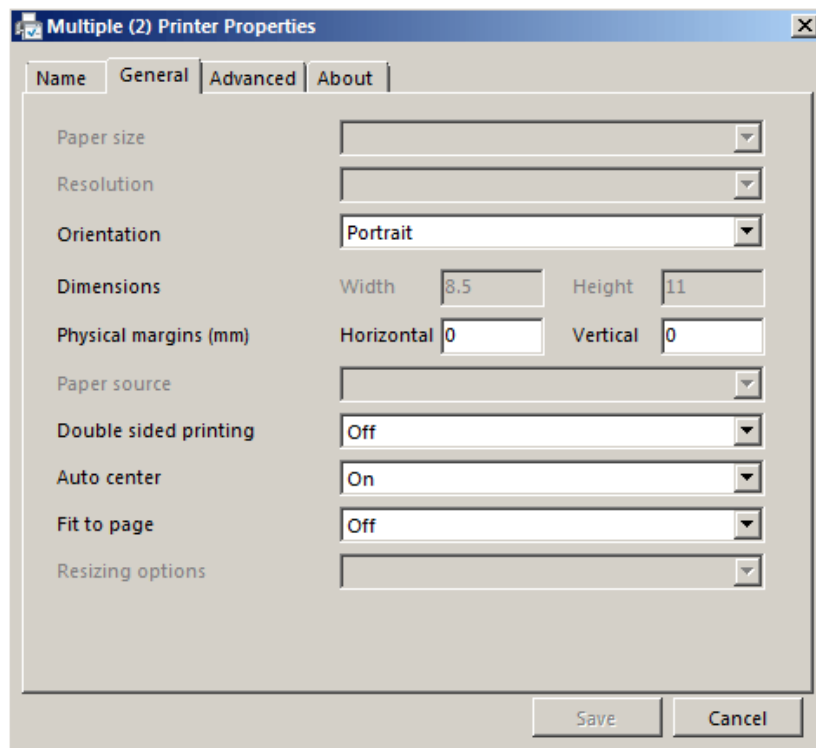
5. If multiple printers are selected, only the common properties are shown. Blank or disabled fields indicate that the properties are not the same and must be set individually. Changing a property will change it for all selected printers.

In the **Name** tab, only the comment can be changed.



NOTE: The name and shared name of a UniPrint Gateway printer can be changed by using Publish Options on the UniPrint Print Server and then republishing the printer to the UniPrint Bridge.

In the **General** tab, you can only set the active properties.



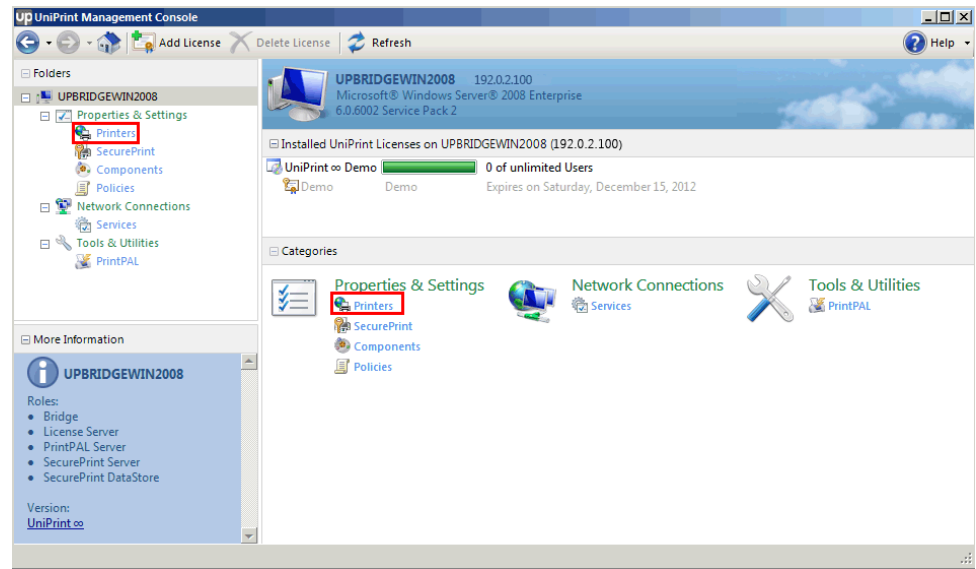
6. Change the desired properties and then click **Save**.

Adding a Lexmark/HP FTP Printer

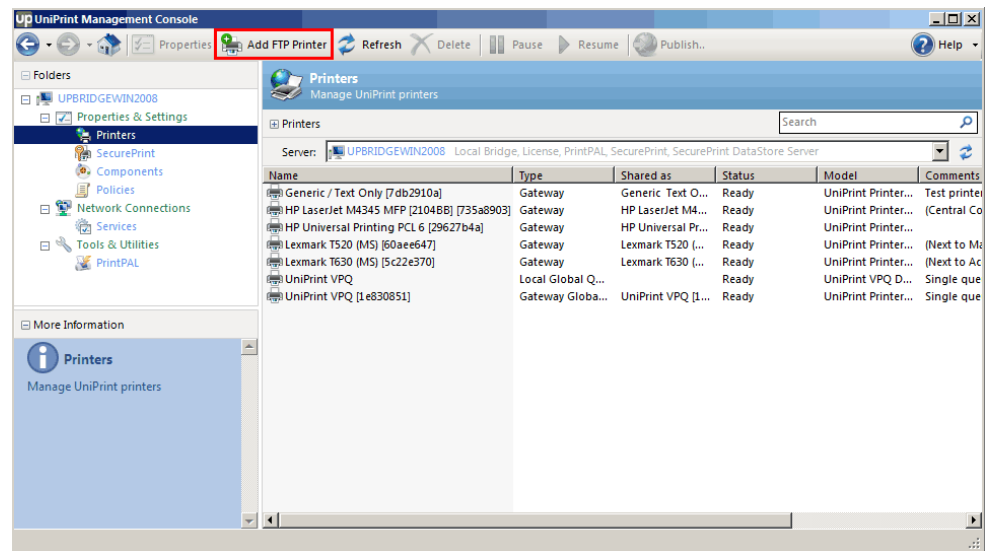
UniPrint Infinity can be defined and configured to send print jobs directly to Lexmark/HP FTP printers without going through a UniPrint Print Server. Since each UniPrint-ready Lexmark/HP FTP printer acts as its own print server, it can directly interpret PDF files without installing native printer drivers.

1. From the UniPrint Bridge, open the **UniPrint Management Console**.

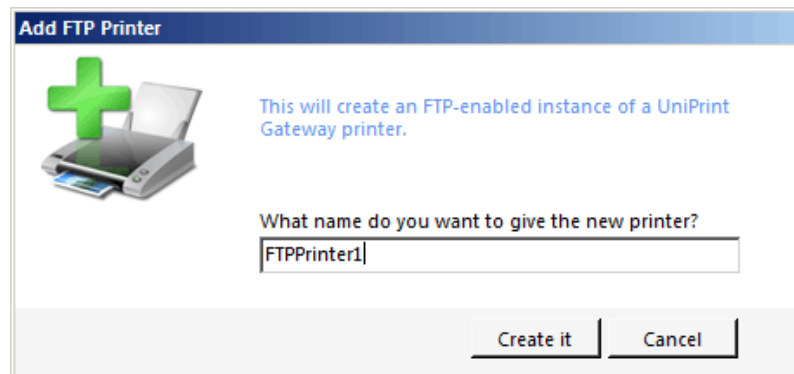
2. Under **Properties & Settings**, click **Printers**.



3. Click **Add Printers**.



4. Enter the new printer name, then click **Create it**.



5. In **FTP** tab, enter the information that is relevant to your configuration.

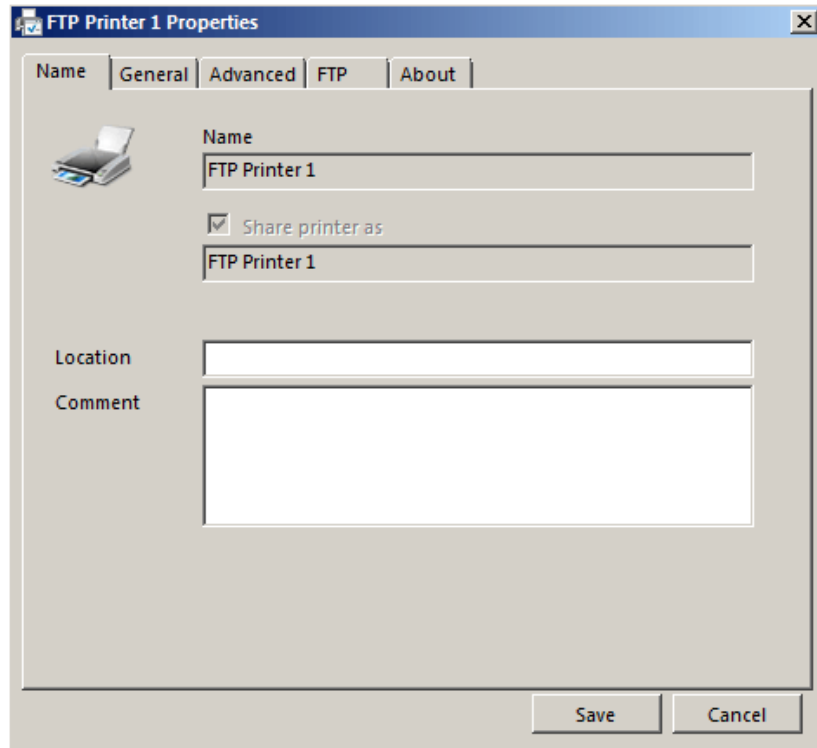
The screenshot shows the 'FTP Printer 1 Properties' dialog box with the 'FTP' tab selected. The dialog has tabs for 'Name', 'General', 'Advanced', 'FTP', and 'About'. The 'FTP' tab contains the following fields and controls:

- Address:** A text field with the placeholder text 'Mandatory field'.
- Port:** A text field containing the value '21'.
- Anonymous login:** A checkbox that is currently unchecked.
- Username:** A text field with the placeholder text 'Mandatory field'.
- Password:** A text field with the placeholder text 'Mandatory field'.
- Confirm password:** A text field with the placeholder text 'Mandatory field'.

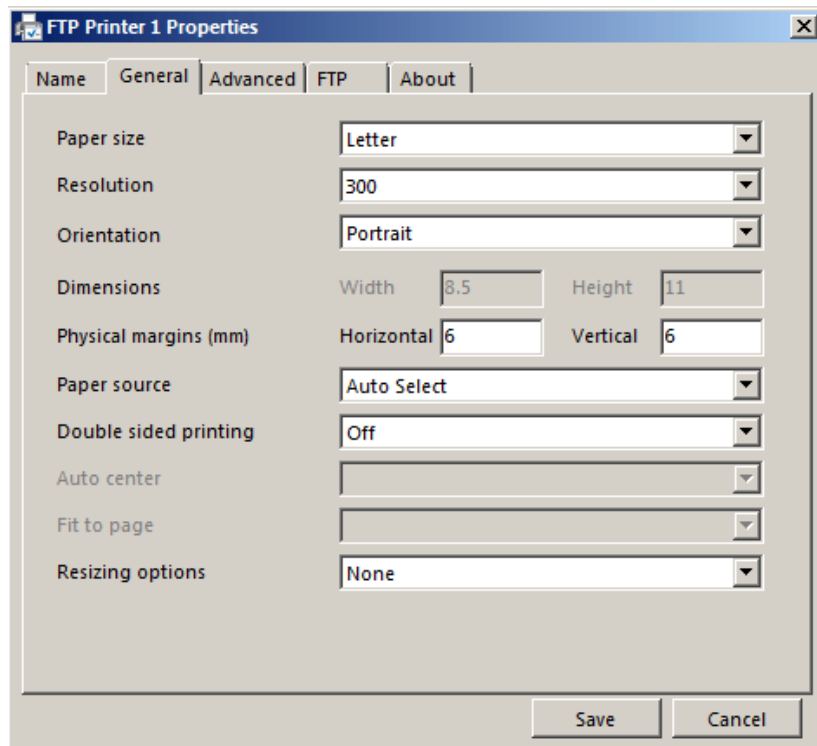
At the bottom of the dialog, there is a yellow status bar with a warning icon and the text 'Incomplete...'. Below the status bar are 'Save' and 'Cancel' buttons.

- **Address:** The IP address of the Lexmark/HP FTP printer.
- **Port:** The FTP listener port of the Lexmark/HP FTP printer. *Default is 21.*
- **Anonymous Login:** Click to select if anonymous logins are allowed. If this check box is cleared enter the Username, Password and Confirm Password.
- **Username:** The FTP account for submitting print jobs to the Lexmark/HP FTP printer.
- **Password:** The FTP account password for submitting print jobs to the Lexmark/HP FTP printer.
- **Confirm Password:** Enter the FTP account password again.

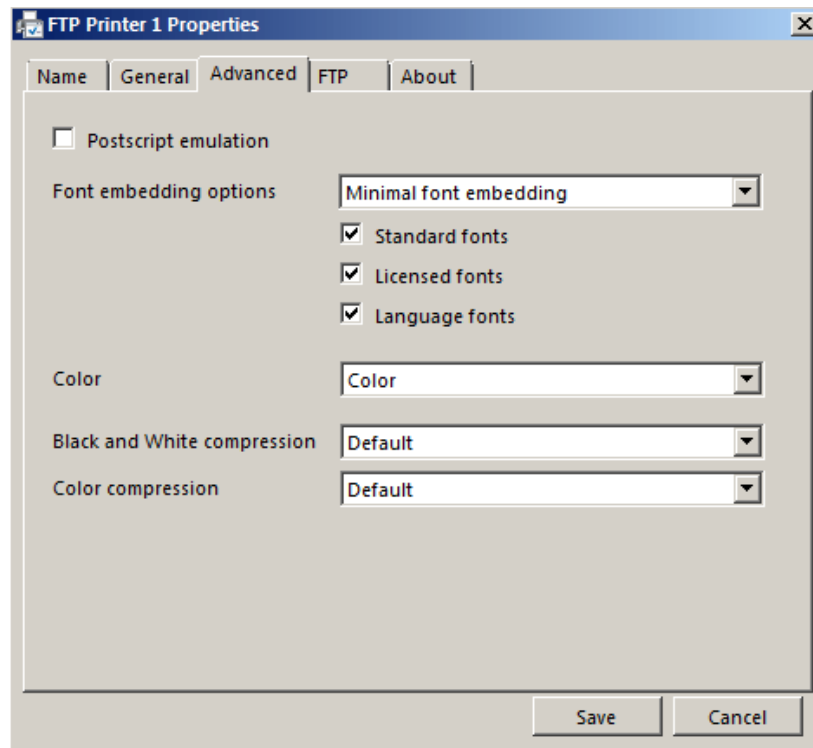
6. In the **Name** tab, enter the **Location** and **Comment** for the Lexmark/HP FTP printer.



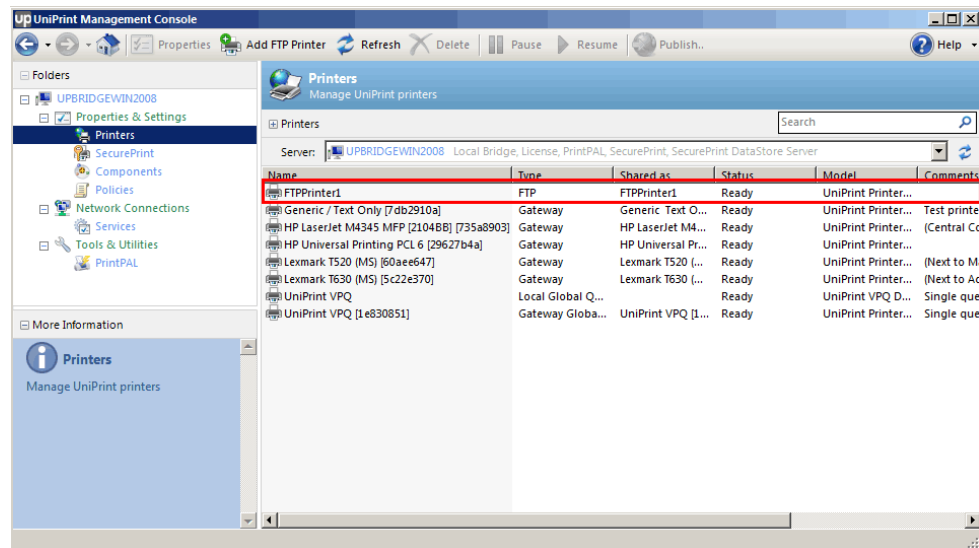
7. Click the **General** tab to edit the default printer properties as desired.



8. Click the **Advanced** tab to edit the default settings as desired.



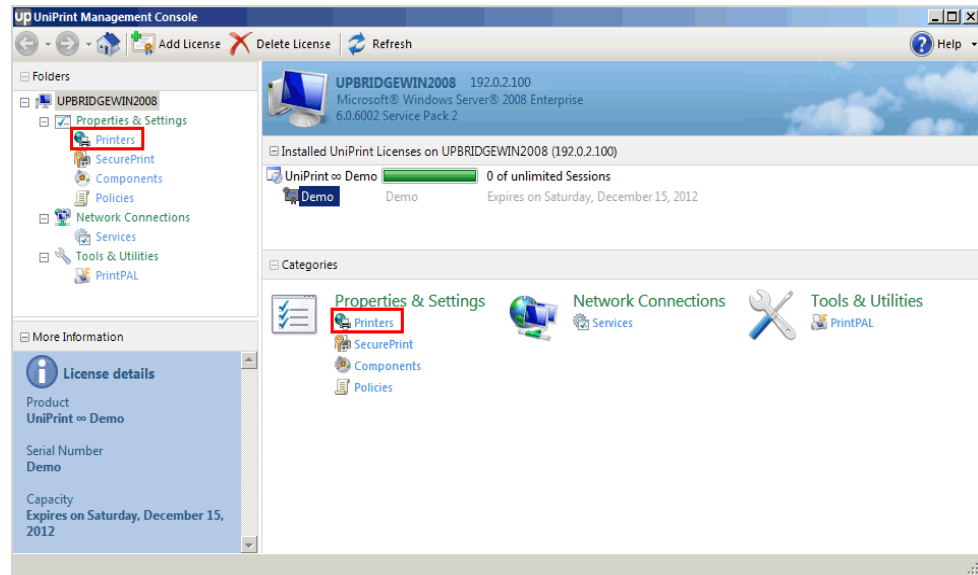
9. Click **Save**. The new printer should appear in the printer list as type **FTP**.



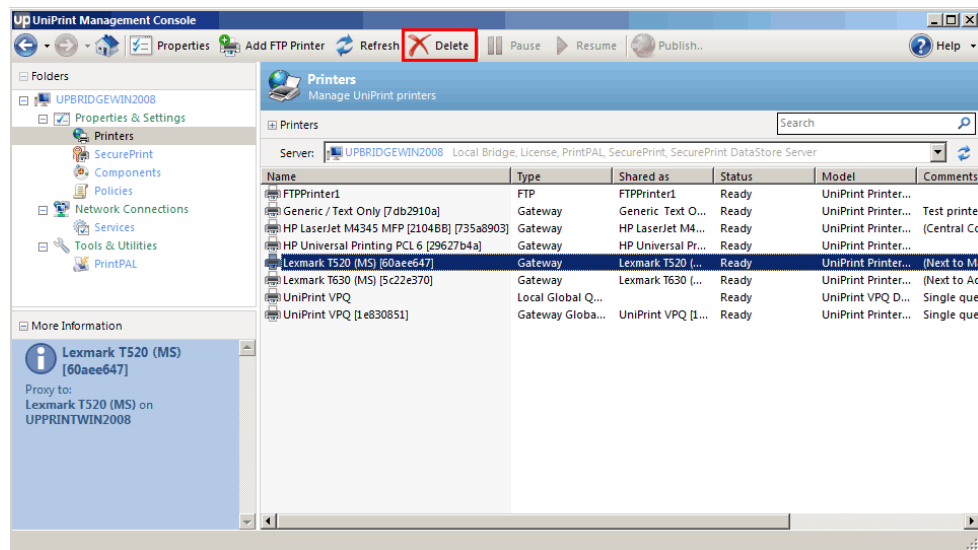
Deleting a Gateway Printer from the UniPrint Bridge

Deleting a printer from the UniPrint Bridge does not delete it from the UniPrint Print Server.

1. From the UniPrint Bridge, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **Printers**.



3. Click to select the printer that you want to delete and then click **Delete**.



4. Click **Yes** to confirm that you want to delete the selected printer.



To recreate the printer later, click **Publish** on the UniPrint Print Server's **Printers** screen.

Configuring UniPrint Print Server

From the UniPrint Print Server, administrators can add new Gateway printers, publish them to the UniPrint Bridge, specify how printers are published, and access the Printer Profiler utility to create custom printer profiles.

Adding a Gateway printer

To add a Gateway printer on the UniPrint Print Server, do the following:

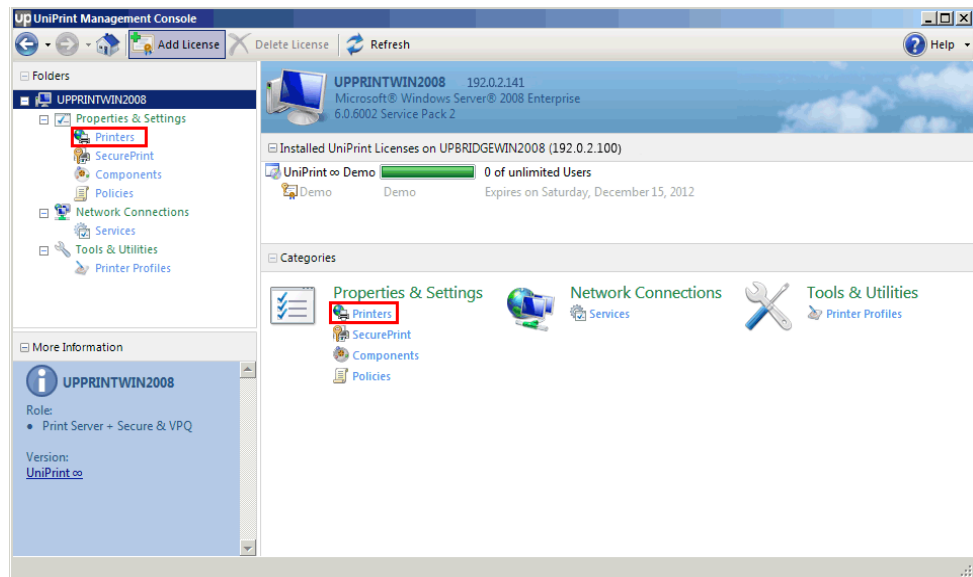
1. On the UniPrint Print Server, click **Start** and then click **Control Panel**.
2. Click **Printers**.
3. Click either **Add a printer** or **Add Printer** and then follow the printer manufacturer's instructions for installing their printer driver.



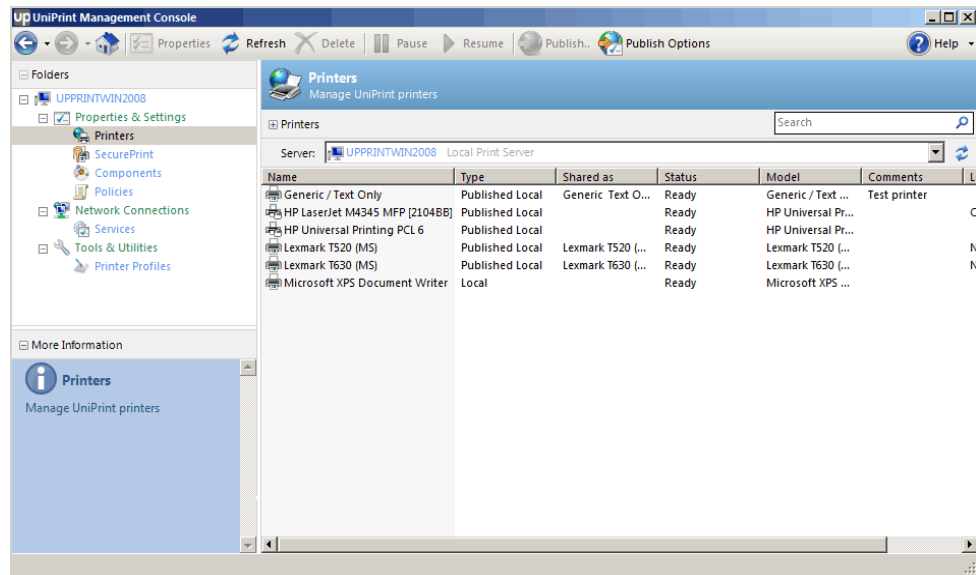
NOTE: It is recommended that PCL 5 print drivers be installed over PCL 6 and universal print drivers to achieve optimal UniPrint performance.

4. Click **Start**, click **All Programs**, click **UniPrint Suite** and then click **UniPrint Management Console**.

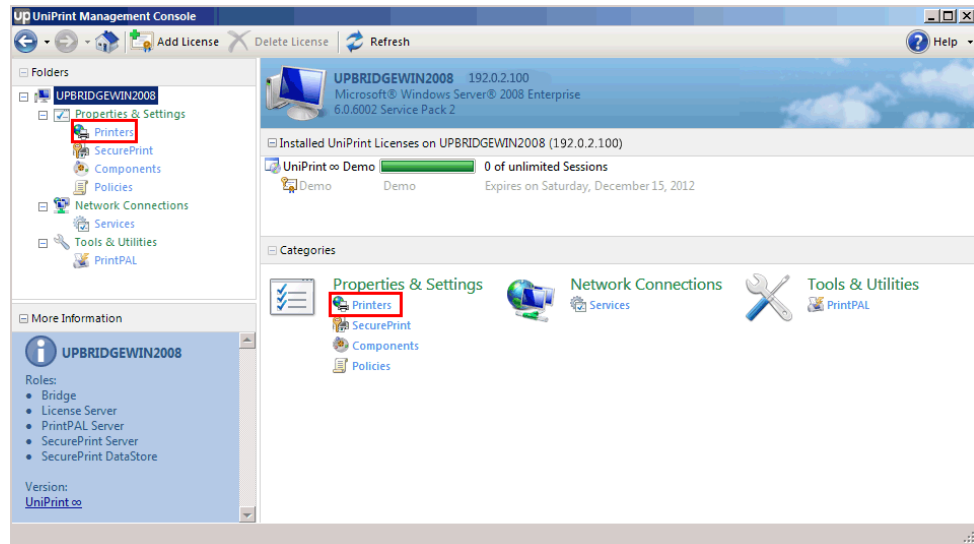
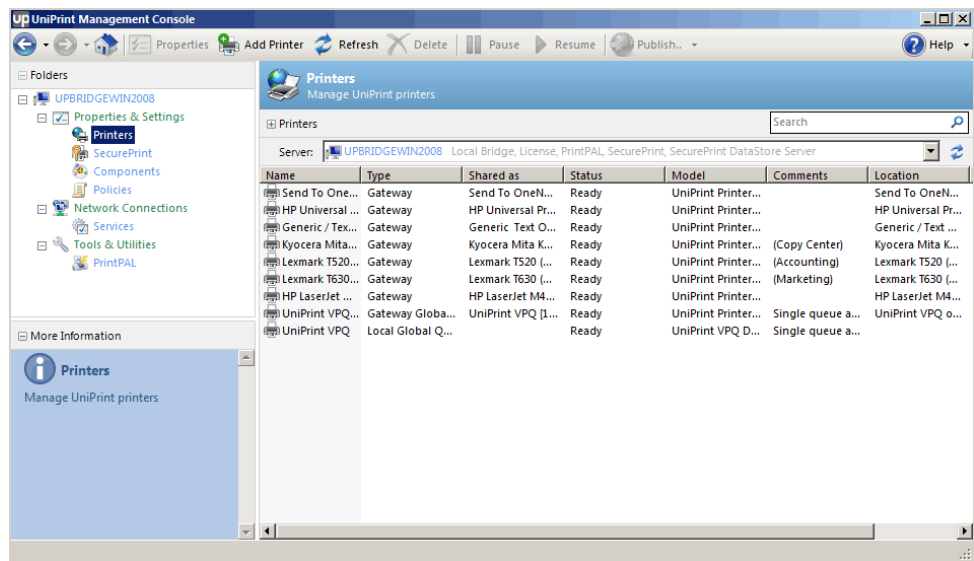
5. Under **Properties & Settings**, click **Printers**.



6. Ensure that the test printer appears of type **Published Local**.



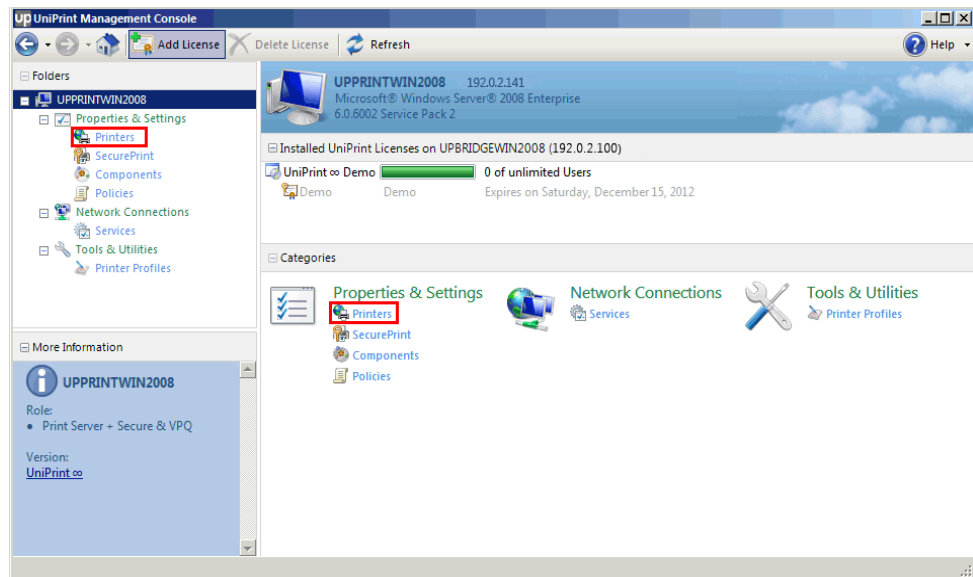
7. On the UniPrint Bridge, open the **UniPrint Management Console**.

8. Under **Properties & Settings**, click **Printers**.9. The new printer will appear in the printer list of type **Gateway**.

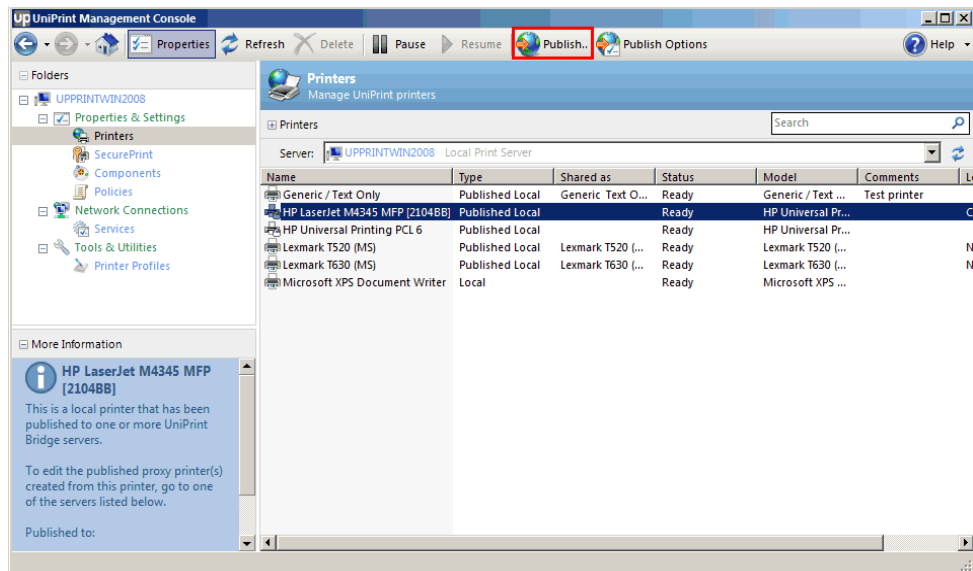
Re-publishing a Printer to the UniPrint Bridge

1. On the UniPrint Print Server, open the **UniPrint Management Console**.

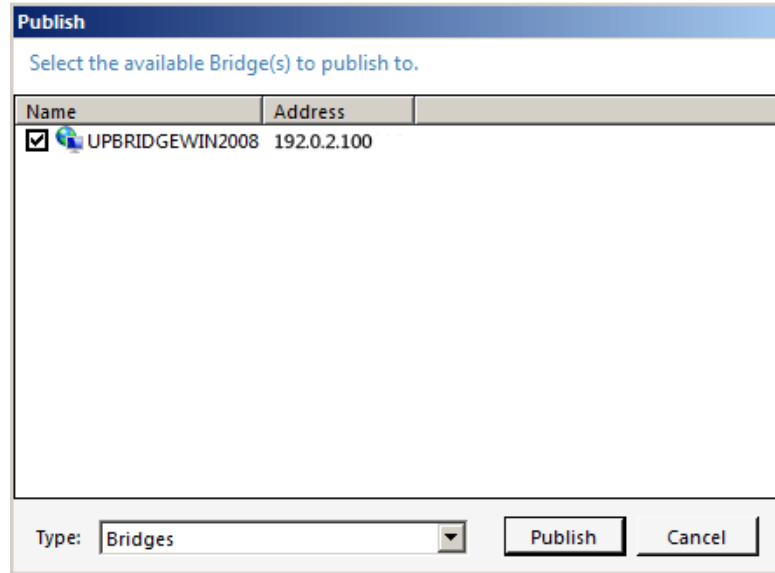
2. Under **Properties & Settings**, click **Printers**.



3. Click to select a printer to re-publish and then click **Publish**.

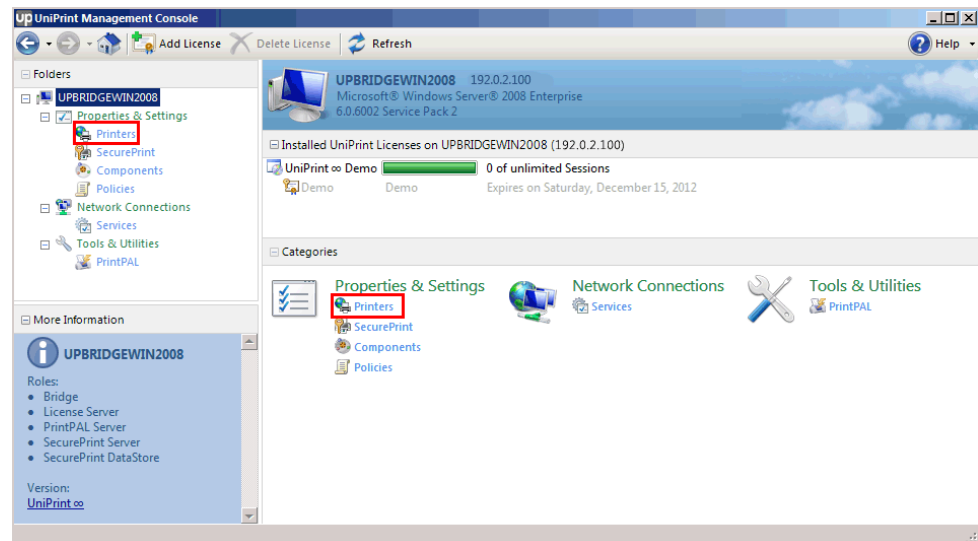


4. Select the UniPrint Bridge(s) to which you want to publish the printer and then click **Publish**.

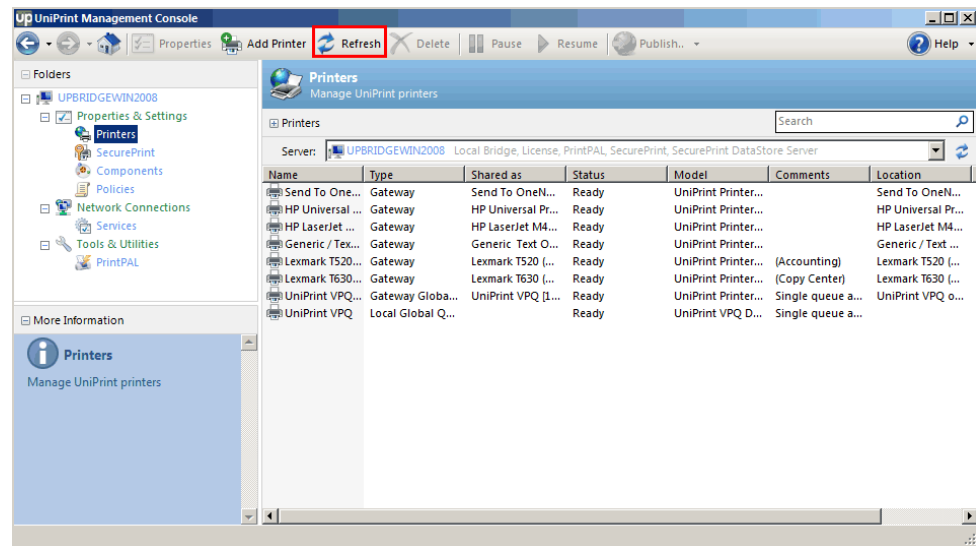


5. On the UniPrint Bridge, open the **UniPrint Management Console**.

6. Under **Properties & Settings**, click **Printers**.



- Click **Refresh**, if the printer does not immediately appear.



- If the printer still does not appear, restart the UniPrint Control Service in the Components screen.

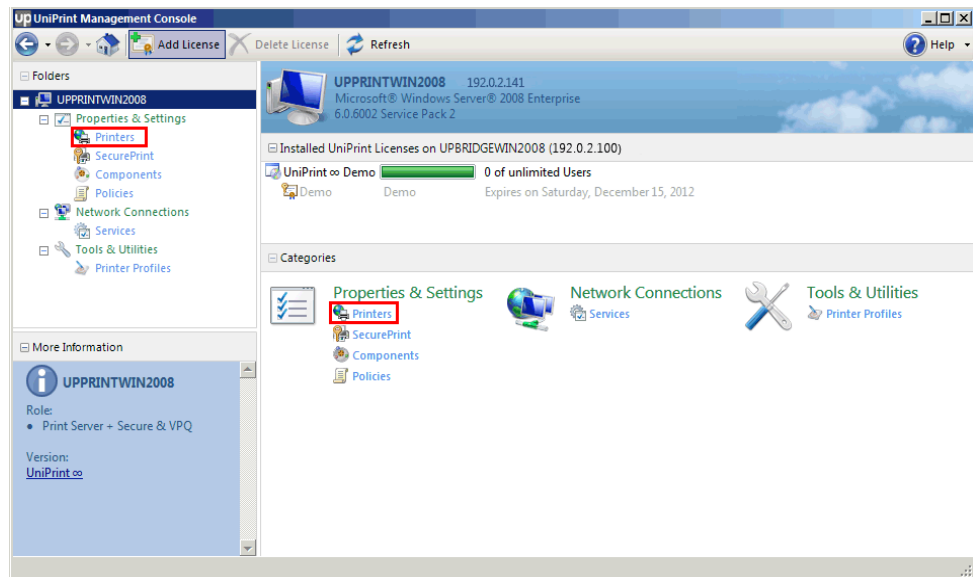
Changing How Gateway Printers are Published to the UniPrint Bridge

Part of the UniPrint Print Server's function is to enumerate available printers on each print server and make them available on the UniPrint Bridge. If a printer is inadvertently deleted from the UniPrint Bridge, the UniPrint Print Server can republish the printer to the UniPrint Bridge.

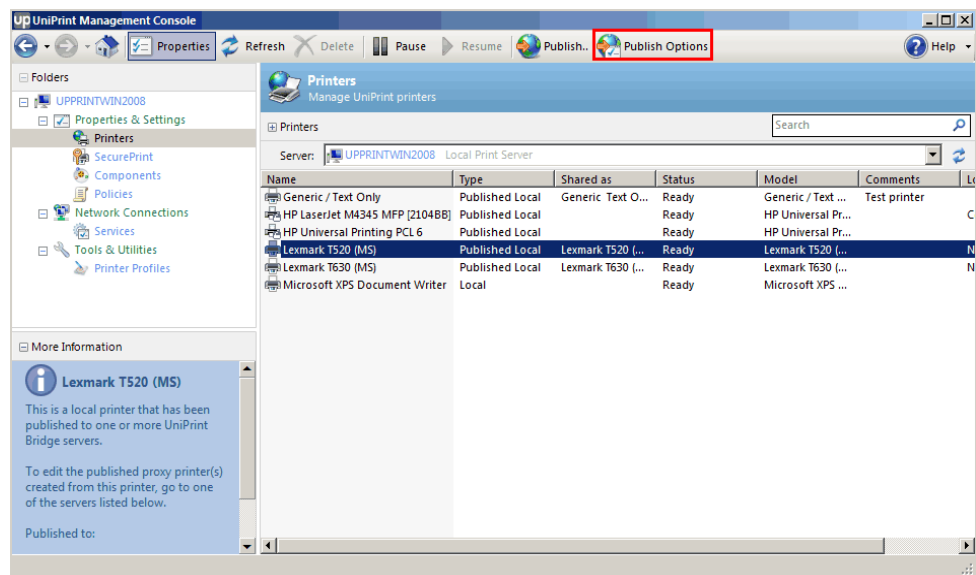
To change how printers are published to the UniPrint Bridge, do the following:

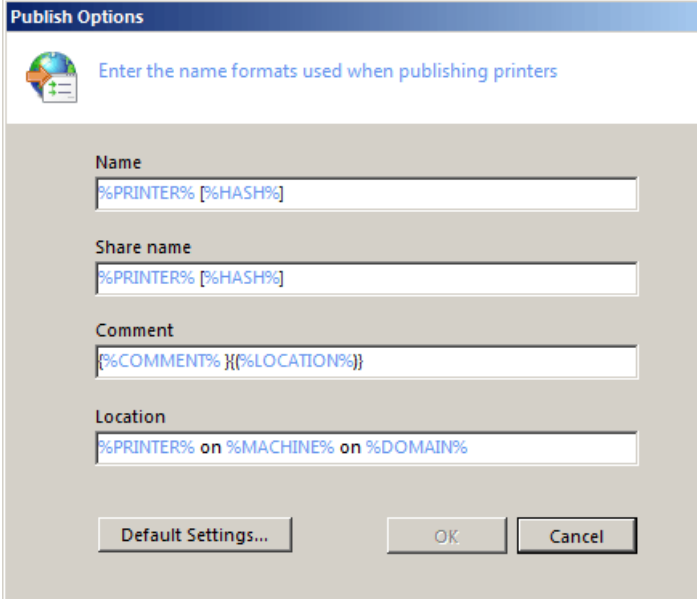
- On the UniPrint Print Server, open the **UniPrint Management Console**.

2. Under **Properties & Settings**, click **Printers**.



3. Click to select a printer and then click the drop-down arrow beside **Publish**. Select **Publish Options**.





Publish Options

Enter the name formats used when publishing printers

Name

Share name

Comment

Location

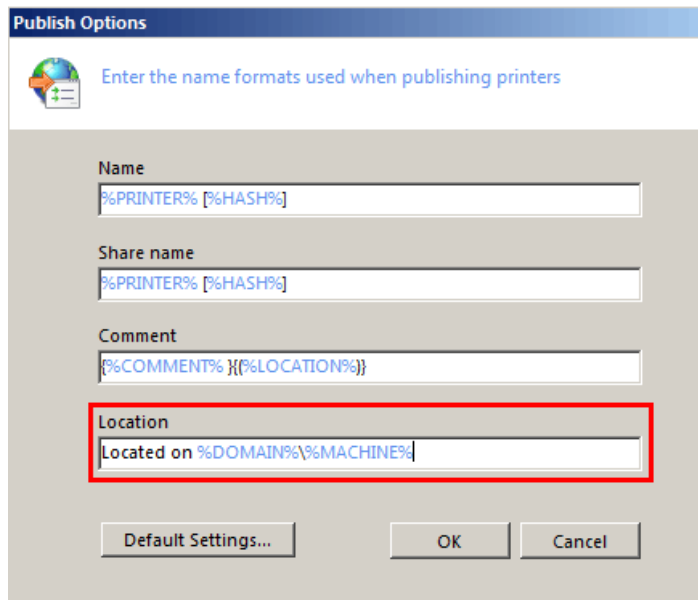
Default Settings... OK Cancel

Placeholders are used to represent variables and can be rearranged or deleted depending on how you would like the printers to be published and displayed on the UniPrint Bridge.

%PRINTER%	Printer name.
%HASH%	Hash number assigned by UniPrint to ensure each Gateway printer is unique.
%COMMENT%	Comments provide general information about the printer. UniPrint imports this information from the Comment field of the local Print Server queue.
%LOCATION%	Location describes where the printer is situated. UniPrint imports this information from the Location field of the local Print Server queue.
%MACHINE%	Print server name.
%DOMAIN%	Domain name of the print server.

- Edit how you would like your printers to be published and then click **OK**. When published to the UniPrint Bridge the printer will appear

as instructed through the **Publish Options** dialog box. Any previously published printers will remain unchanged.



The image shows the 'Publish Options' dialog box. It has a title bar with the text 'Publish Options'. Below the title bar is a header area with a globe icon and the text 'Enter the name formats used when publishing printers'. The main area contains four text input fields: 'Name' with the value '%PRINTER% [%HASH%]', 'Share name' with the value '%PRINTER% [%HASH%]', 'Comment' with the value '%COMMENT% }{[%LOCATION%]}', and 'Location' with the value 'Located on %DOMAIN%\%MACHINE%'. The 'Location' field is highlighted with a red rectangular border. At the bottom of the dialog are three buttons: 'Default Settings...', 'OK', and 'Cancel'.



NOTE: Adding a hash number to the printer name ensures distinctiveness between printers on the UniPrint Bridge. For example, if two printers with identical printer name are published from two different UniPrint Print Servers to the same UniPrint Bridge, then only one printer will be successfully added to the UniPrint Bridge.

5. Re-publish the printer to the UniPrint Bridge.

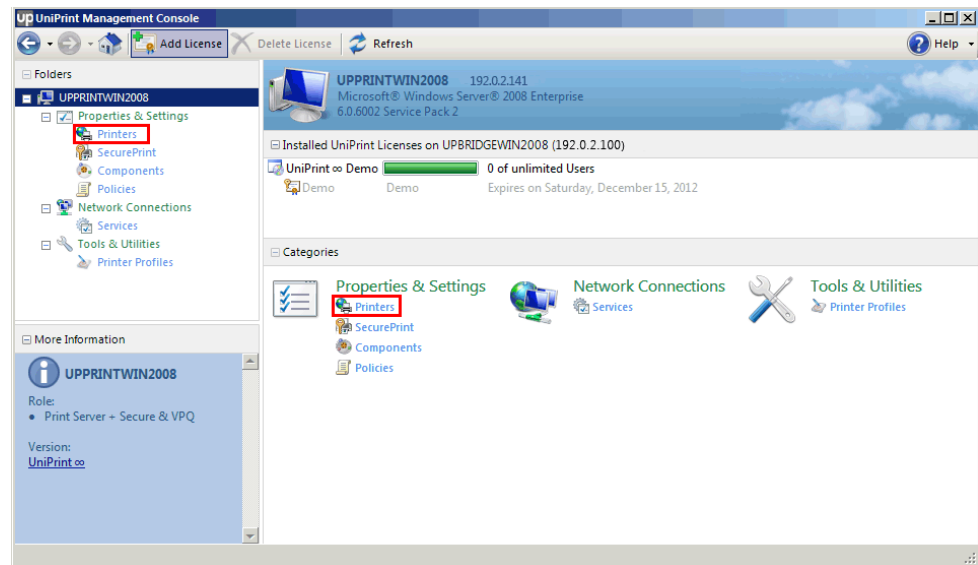
Setting Default Printer Properties for New & Re-published Gateway Queues

Extended default printer properties can be set for newly created and re-published Gateway printers. After setting default printer properties, any Gateway queue that is created or if a current Gateway printer is re-published, will have these default printer properties applied. Printer properties for existing Gateway printers will remain affected until they are re-published.

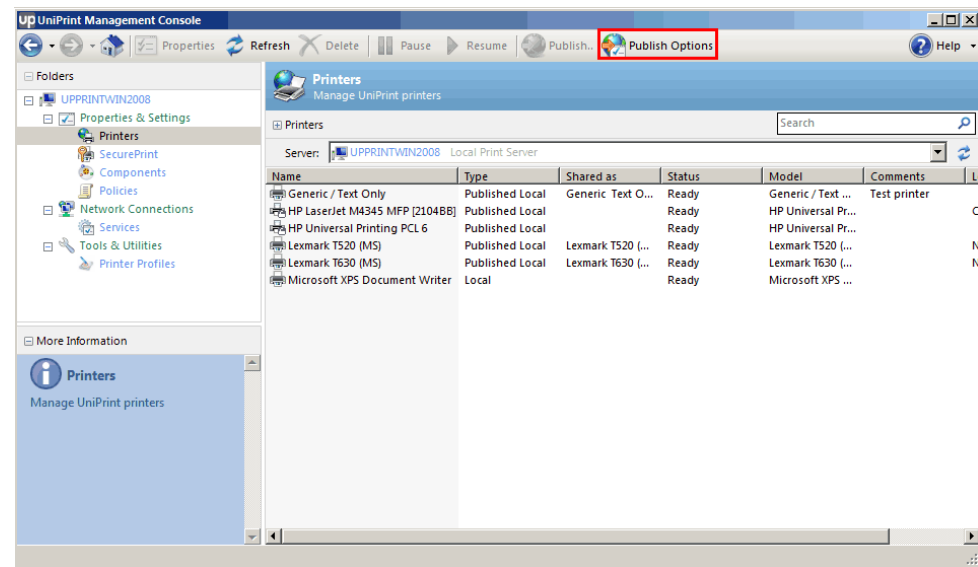
To set default Gateway printer properties, do the following:

1. On the UniPrint Print Server, open the **UniPrint Management Console**.

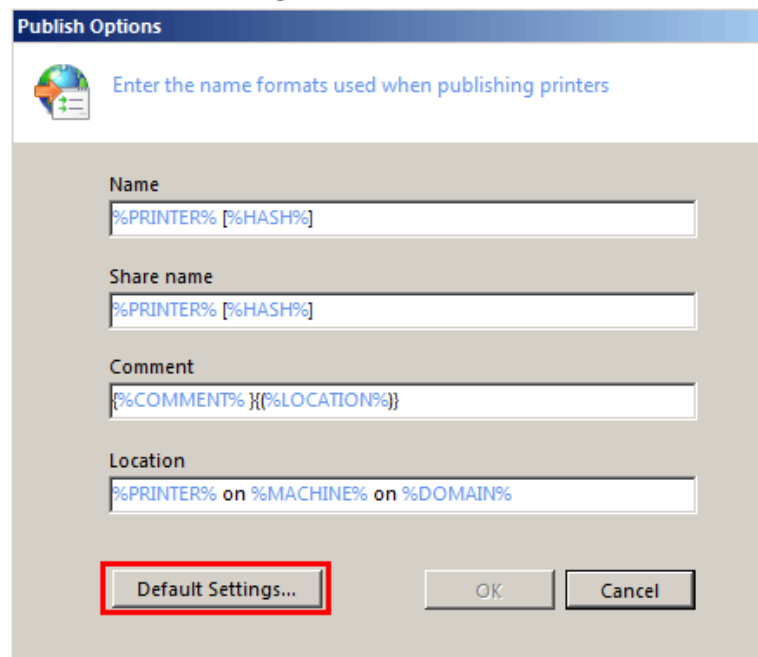
2. Under **Properties & Settings**, click **Printers**.



3. Click **Publish Options**.



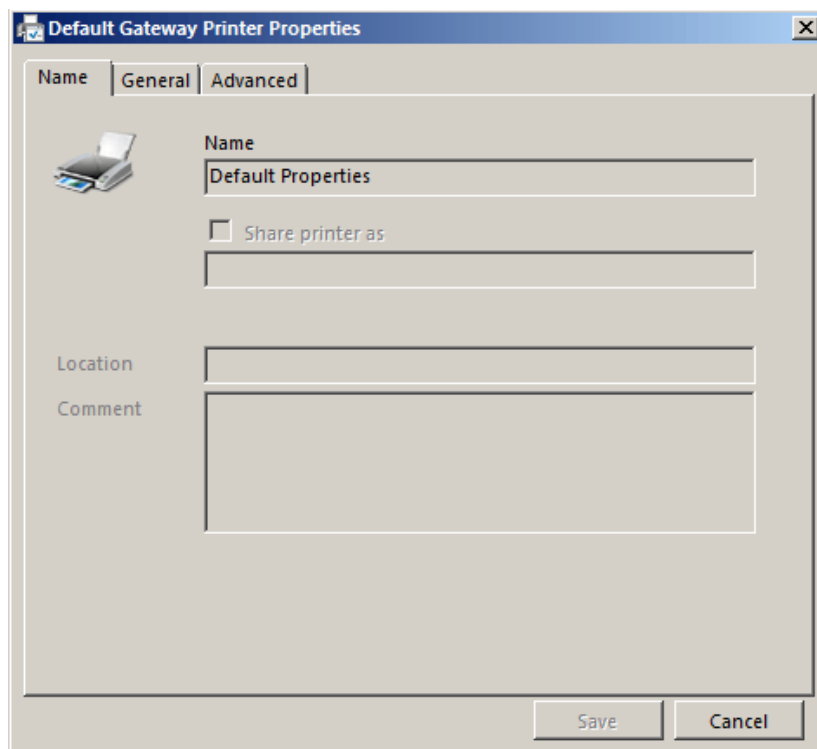
4. Click **Default Settings**.



The **Publish Options** dialog box is shown. It has a title bar with the text "Publish Options". Below the title bar is a blue header area with a globe icon and the text "Enter the name formats used when publishing printers". The main area contains four text input fields: "Name" with the value "%PRINTER% [%HASH%]", "Share name" with the value "%PRINTER% [%HASH%]", "Comment" with the value "{%COMMENT% }{(%LOCATION%)}", and "Location" with the value "%PRINTER% on %MACHINE% on %DOMAIN%". At the bottom, there are three buttons: "Default Settings..." (highlighted with a red rectangle), "OK", and "Cancel".

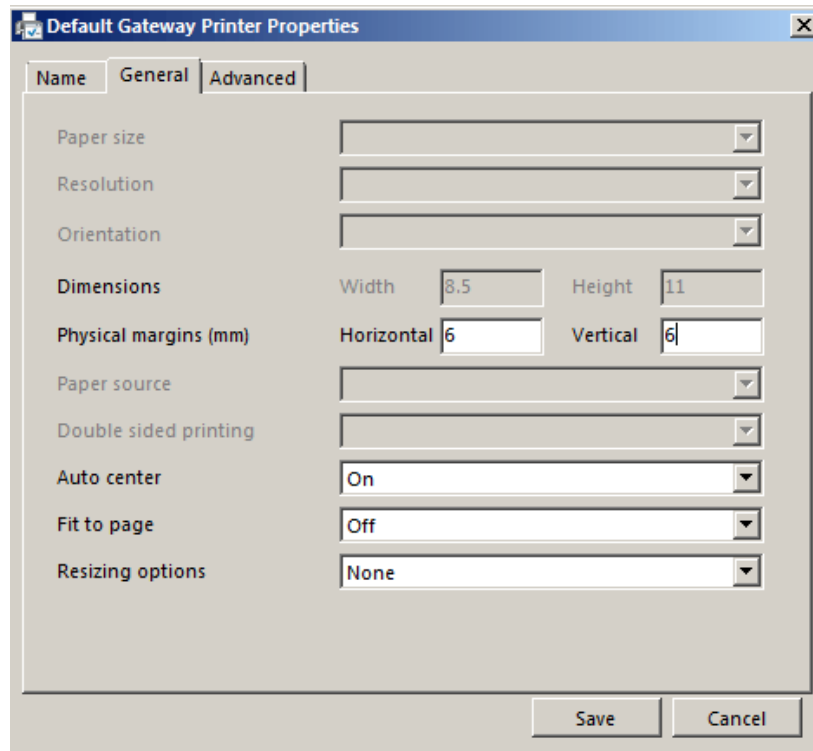
5. Enter administrative credentials for the UniPrint Bridge and then click **OK**.

6. Click the **General** or **Advanced** tab.



The **Default Gateway Printer Properties** dialog box is shown. It has a title bar with the text "Default Gateway Printer Properties" and a close button. Below the title bar are three tabs: "Name", "General", and "Advanced". The "General" tab is selected. The main area contains a printer icon, a "Name" field with the value "Default Properties", a "Share printer as" checkbox (unchecked), a "Location" field, and a "Comment" field. At the bottom, there are two buttons: "Save" and "Cancel".

7. Change the desired properties and then click **Save**.



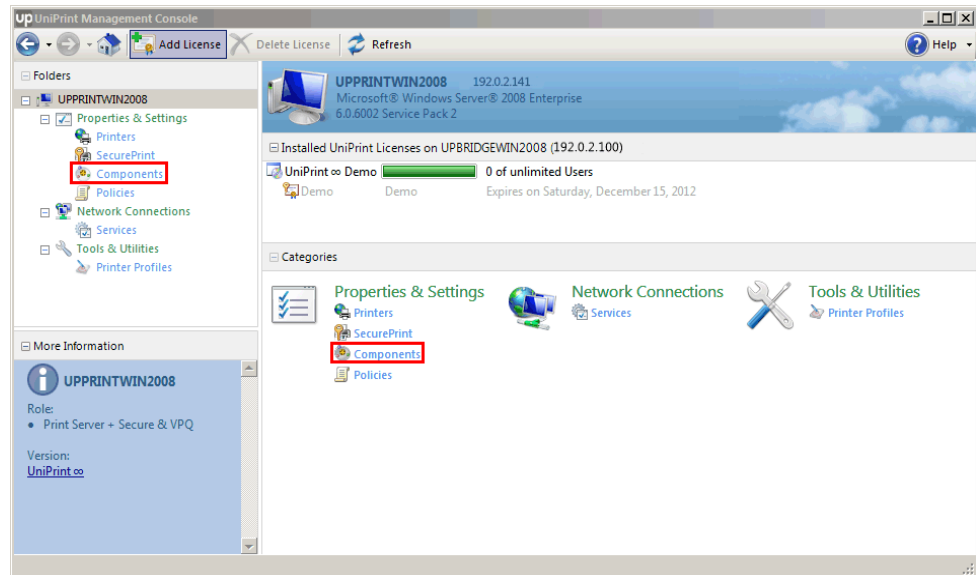
8. Click **Cancel** to exist **Publish Options**.

Enabling Font Replication

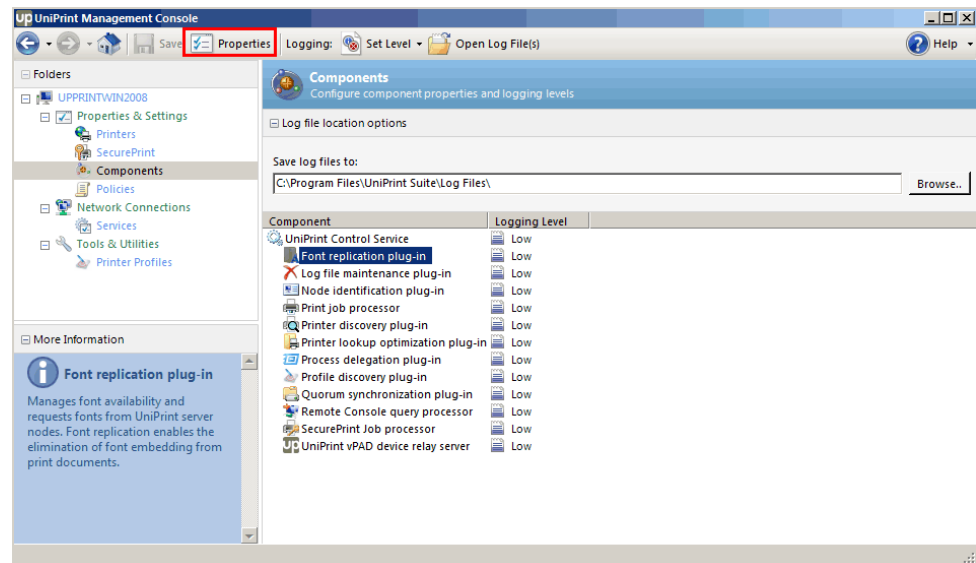
Daily at a pre-scheduled time, UniPrint queries all UniPrint Application Servers for newly installed fonts and replicates them to all UniPrint Print Servers. After fonts are replicated, font embedding is no longer required resulting in smaller print job file sizes, improved overall print job quality and reduced bandwidth consumption.

1. On the UniPrint Print Server, open the **UniPrint Management Console**.

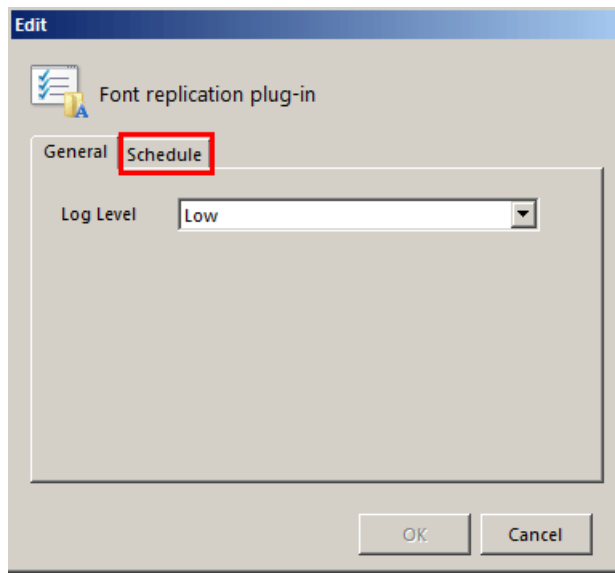
2. Under **Properties & Settings**, click **Components**.



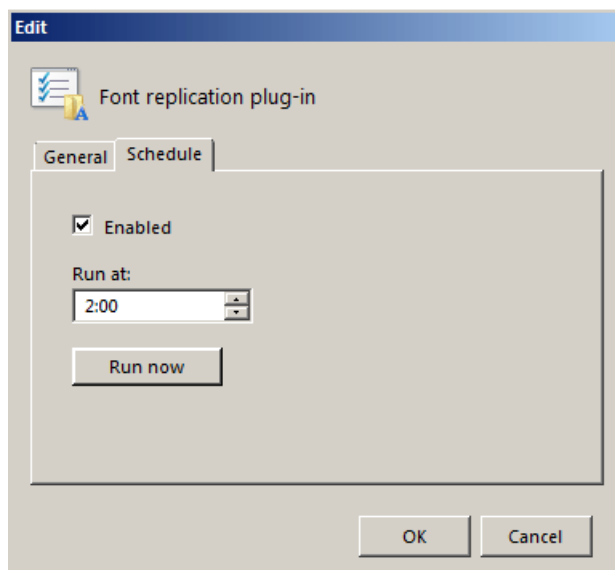
3. Click to select the **Font replication plug-in** and then click **Properties**.



- Click the **Schedule** tab.



- Select **Enabled**.
- Enter a time for the UniPrint Print Server to replicate newly installed fonts from the UniPrint Application Server(s). Default time is set to 02:00 AM.



- Click **OK** or to replicate fonts on demand, click **Run now**.

Configuring Printer Profiles

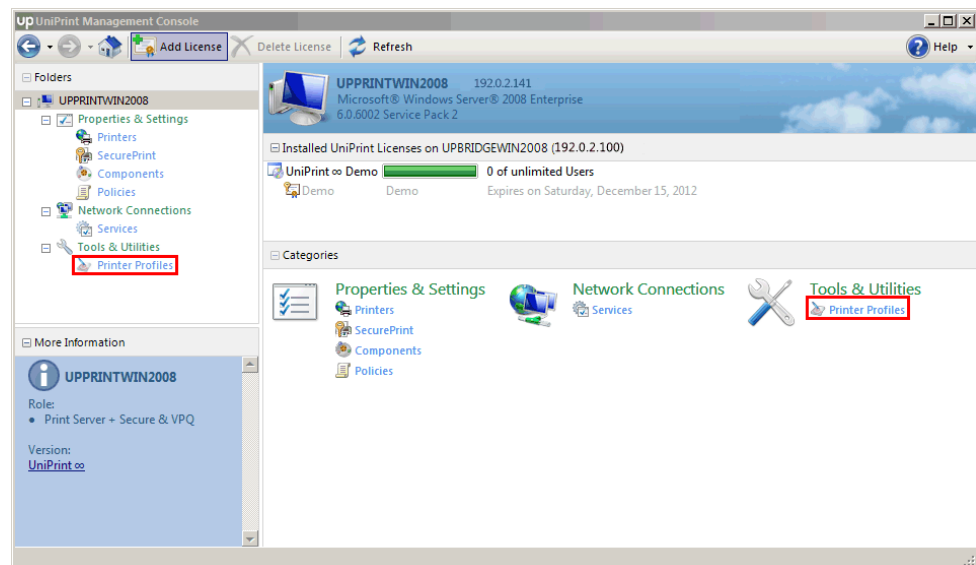
Printer profiles are created on the UniPrint Print Server and can be used to enable advanced printer properties such as stapling, hole punching, binding,

etc., that some printers support since it directly accesses the native printer driver.

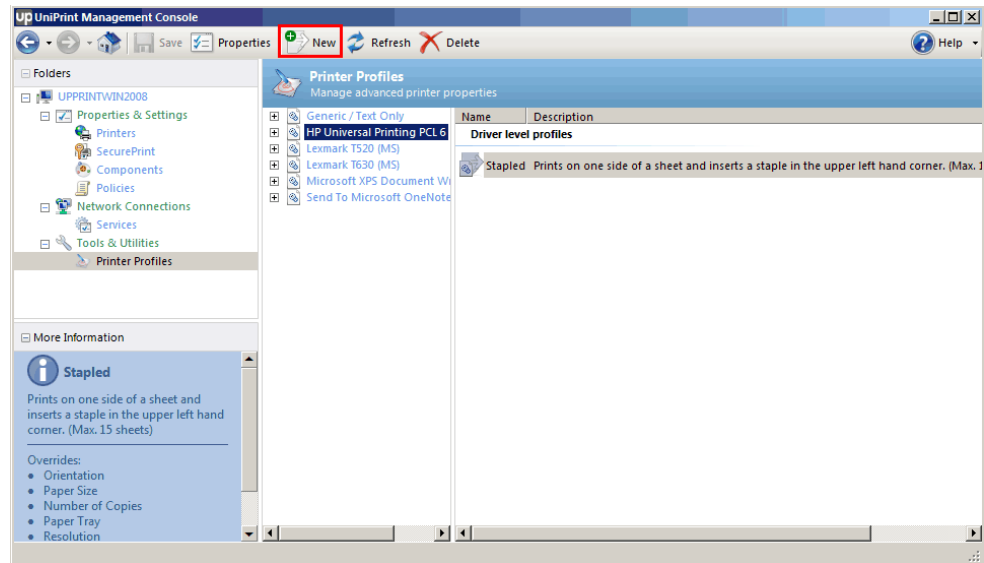
The Printer Profiles snap-in has been updated in this version and profiles can now be selected from the vPad after the user has sent the print job to the UniPrint VPQ. Also added, is the ability to create default printer profiles. If the user does not select an alternate profile, their print job will automatically output using the default printer profile. Default profiles are not user-selectable.

Creating a New Printer Profile

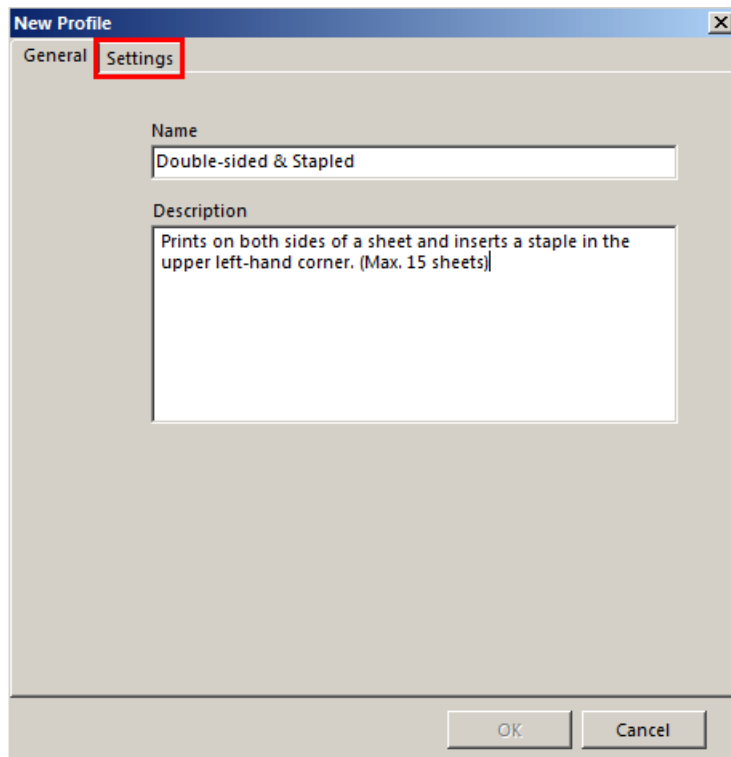
1. On the UniPrint Print Server, open the **UniPrint Management Console**.
2. Under **Tools & Utilities**, click **Printer Profiles**.



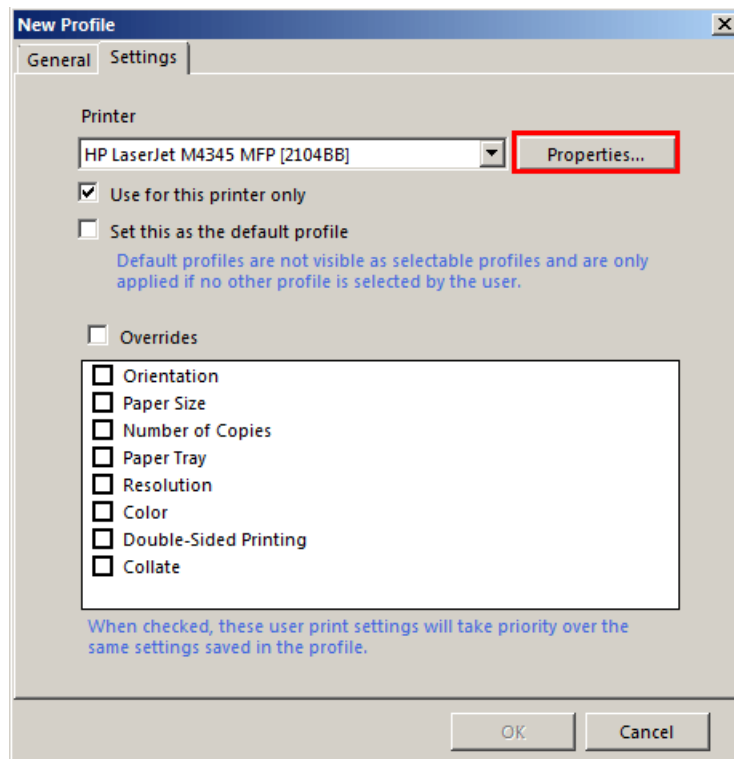
- Click to select a printer and then click **New**.



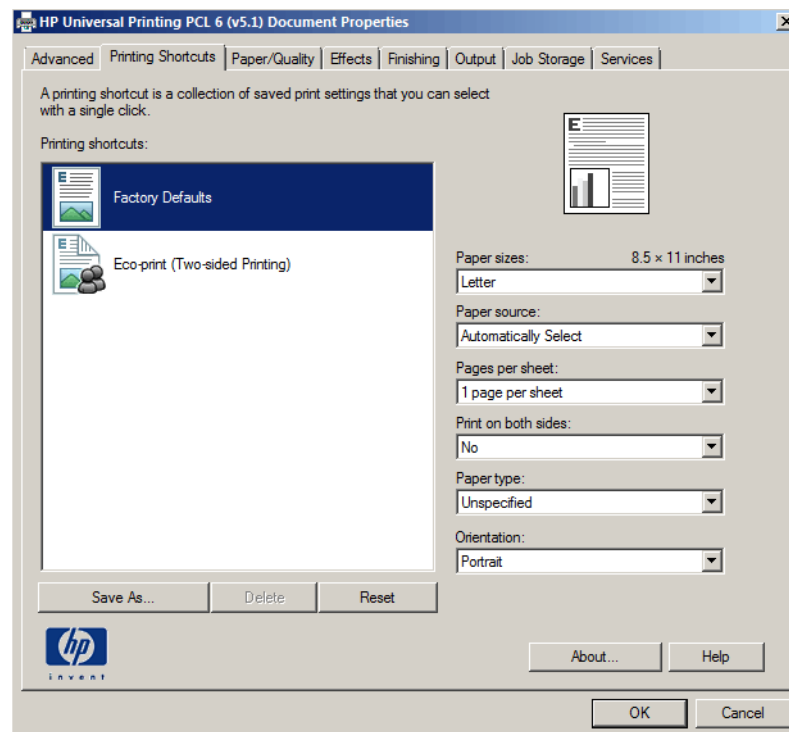
- Enter a name and description for the new printer profile and then click the **Settings** tab.



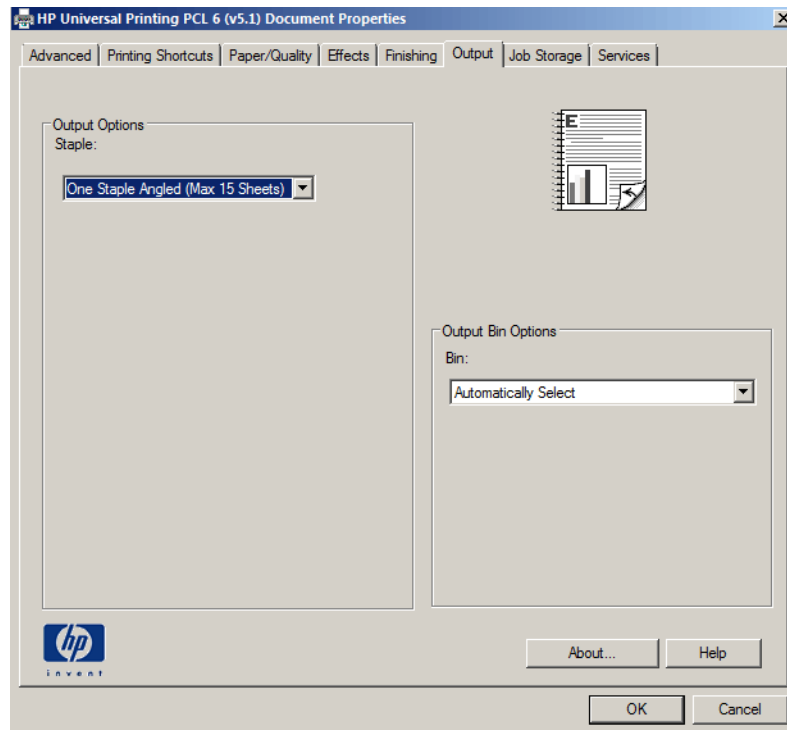
5. Click **Properties**.



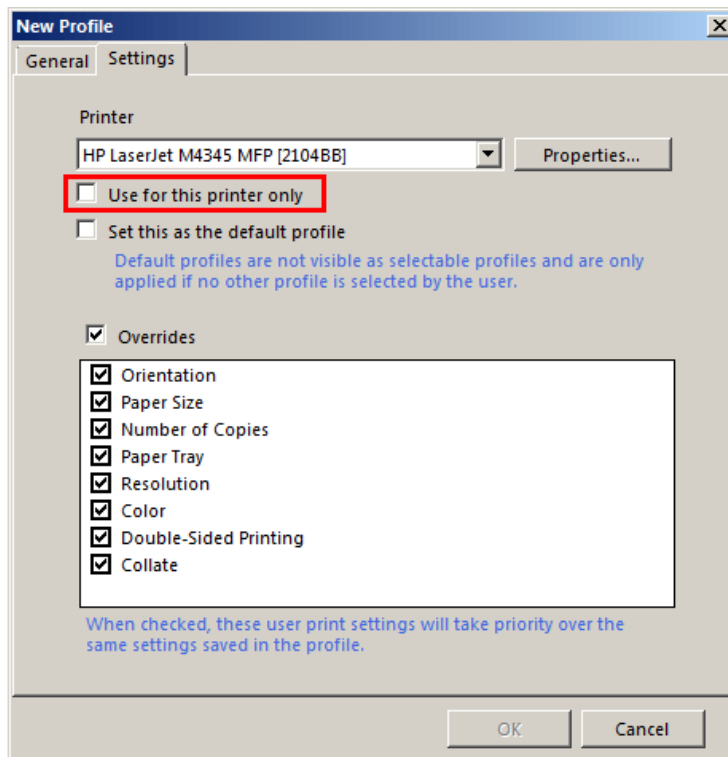
6. The native printer driver will launch.



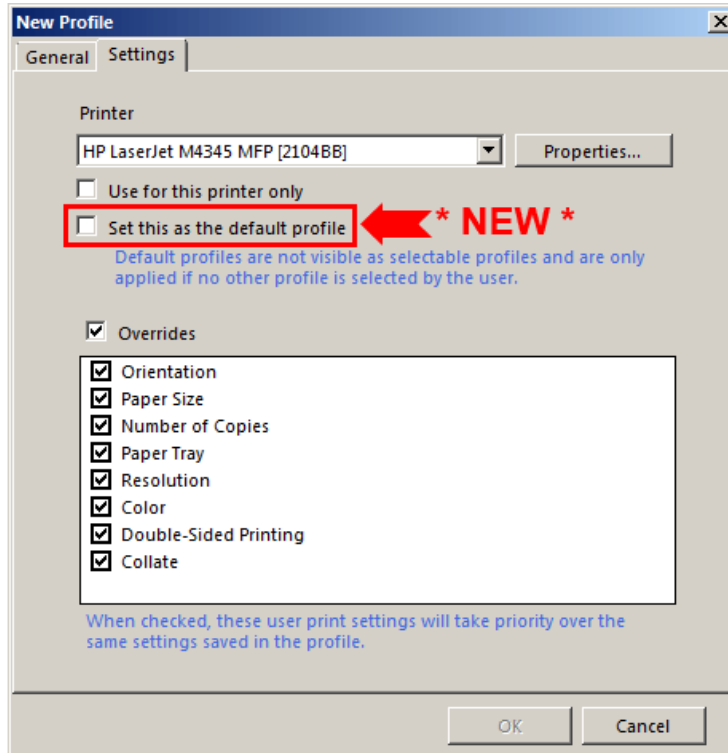
7. Enable or disable the appropriate properties and then click **OK**.



8. If you want this profile to only be applied to the selected printer then click **Use for this printer only**.

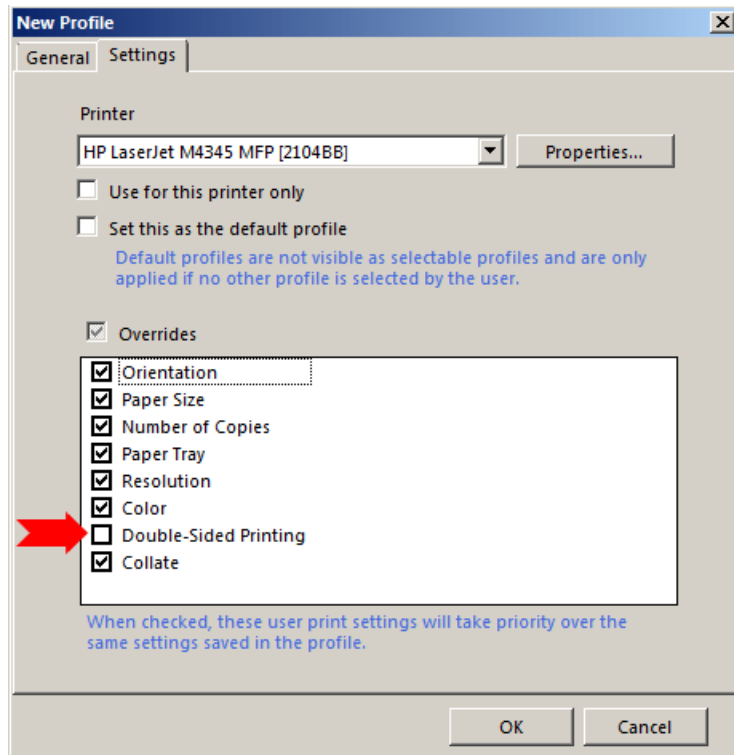


9. If you want this to be the default profile, then click **Set this as the default profile**. Default profiles don't appear in the profiles list and users cannot select them. However, if a profile is not selected by the user then their print job will output using the default profile settings.

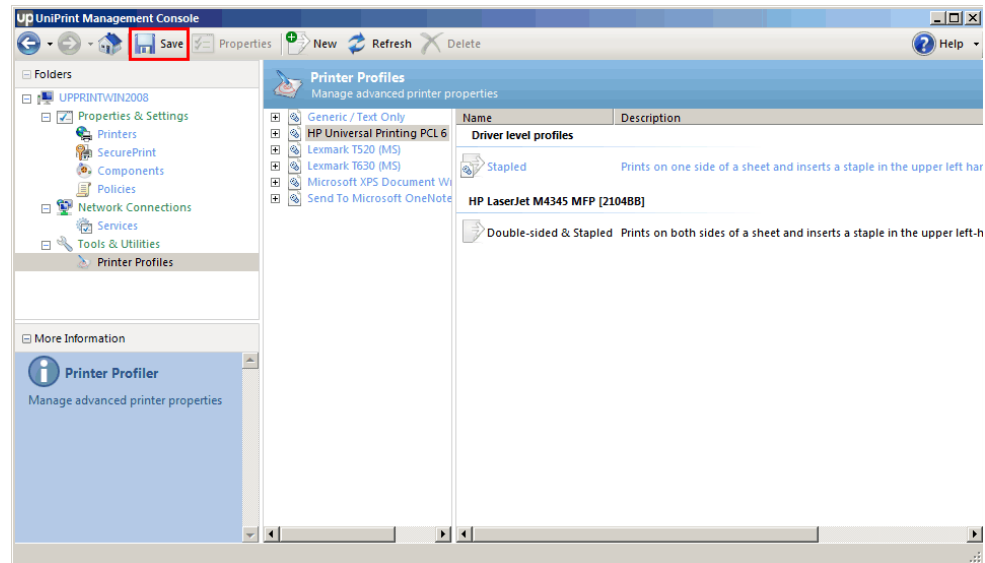


10. Clear any printer property to prevent the user from overriding it. For example, in this profile we want to enforce double-sided printing, so clear **Double-Sided Printing**. If the user wants the document to be

stapled only, they would have to select a different profile since they cannot override this property.



11. Click **OK**.

12. Click **Save**.

NOTE: Certain printer drivers do not adhere to standard Windows methods of resolving print document properties. In these obscure cases, properties set by the user will be ignored during printing.

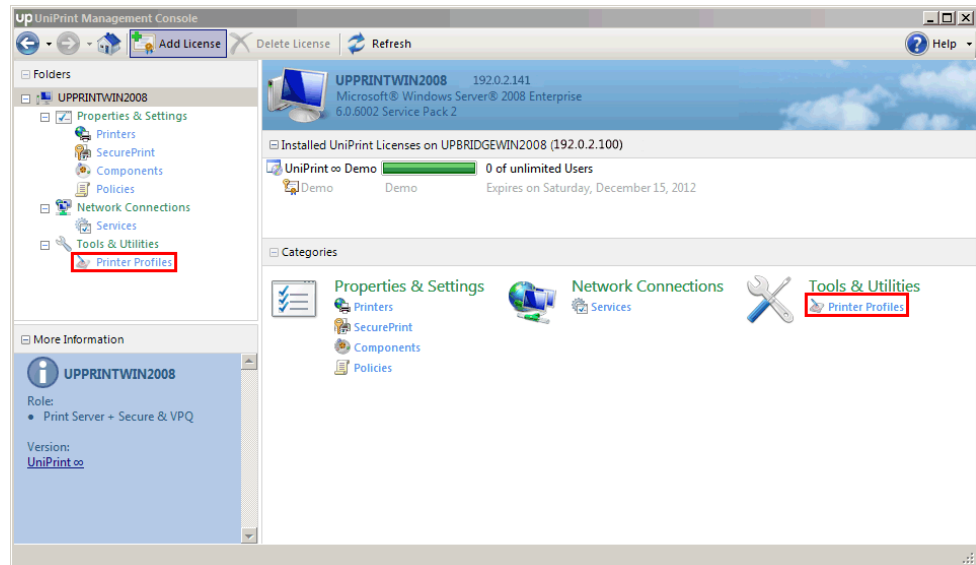
Example: The HP Universal Printing series of drivers ignore the standard Windows “Duplex” (double-sided printing) setting and replace this functionality with HP-specific, non-disclosed settings. Since this setting is “hidden” from Windows applications, the “Duplex” print option set by the user will be ignored and profile settings will be applied.

Recommended Resolution: Create two similar printer profiles. The first profile enables the “Duplex” option and the second profile disables the “Duplex” option.

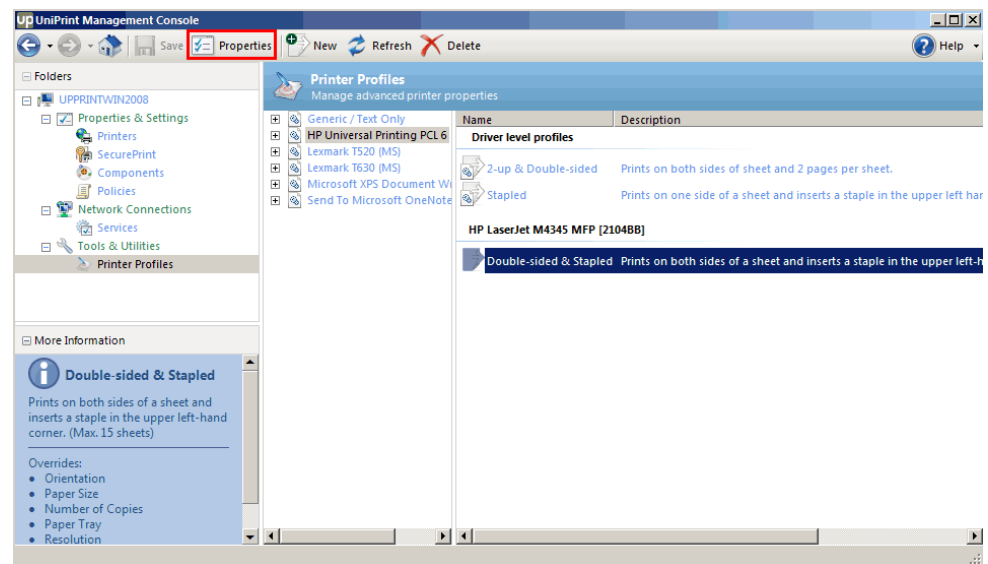
Editing an Existing Printer Profile

1. On the UniPrint Print Server, open the **UniPrint Management Console**.

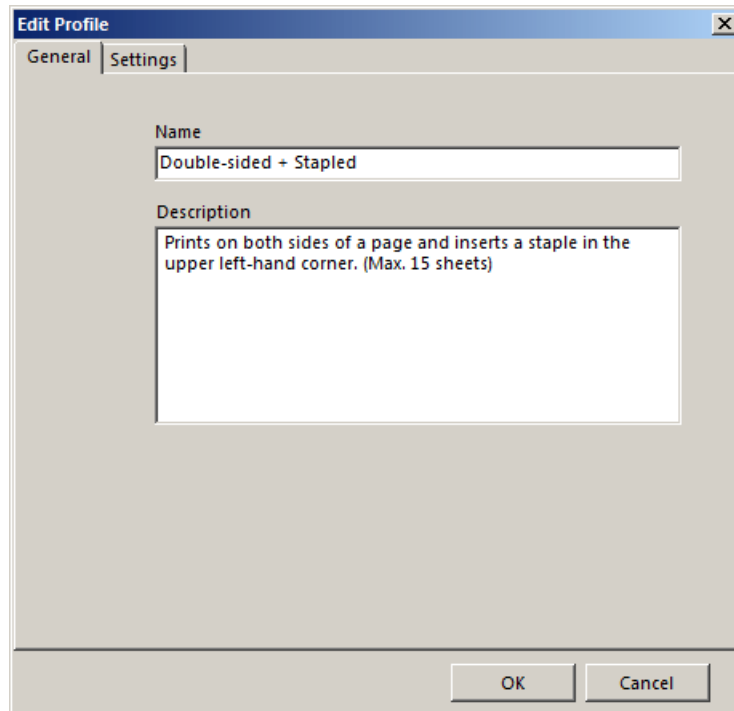
2. Under **Tools & Utilities**, click **Printer Profiles**.



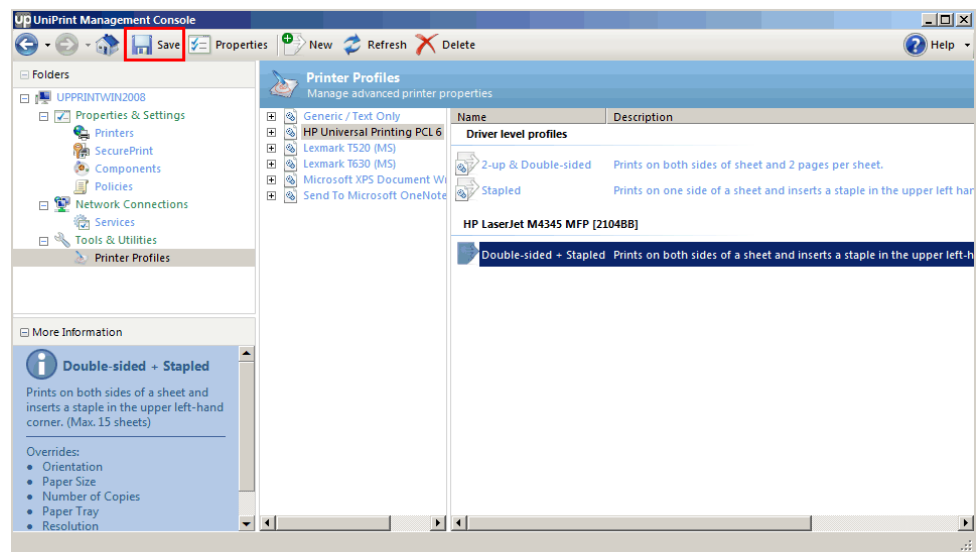
3. Click to select a printer profile and then click **Properties**.



4. Edit the properties, name and/or description and then click **OK**.



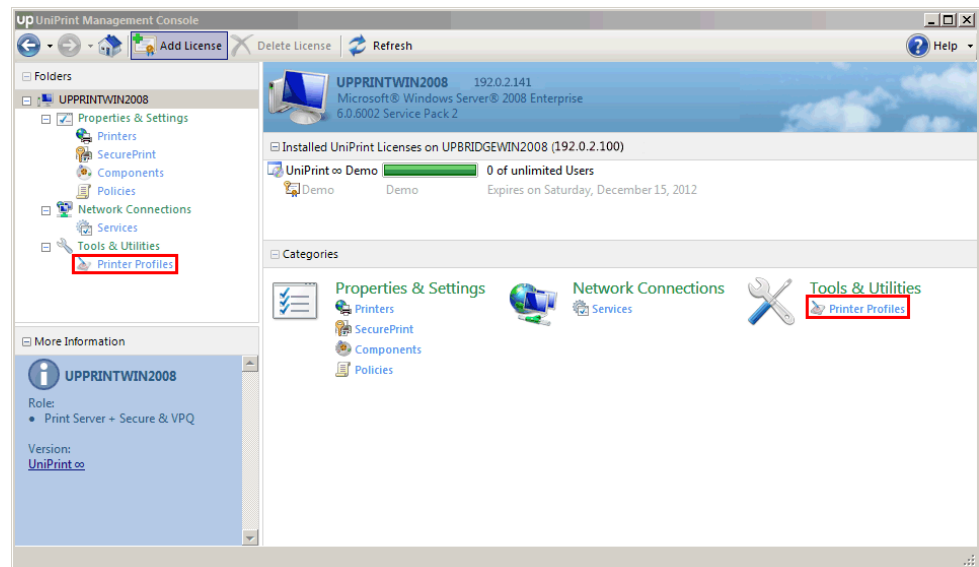
5. Click **Save**.



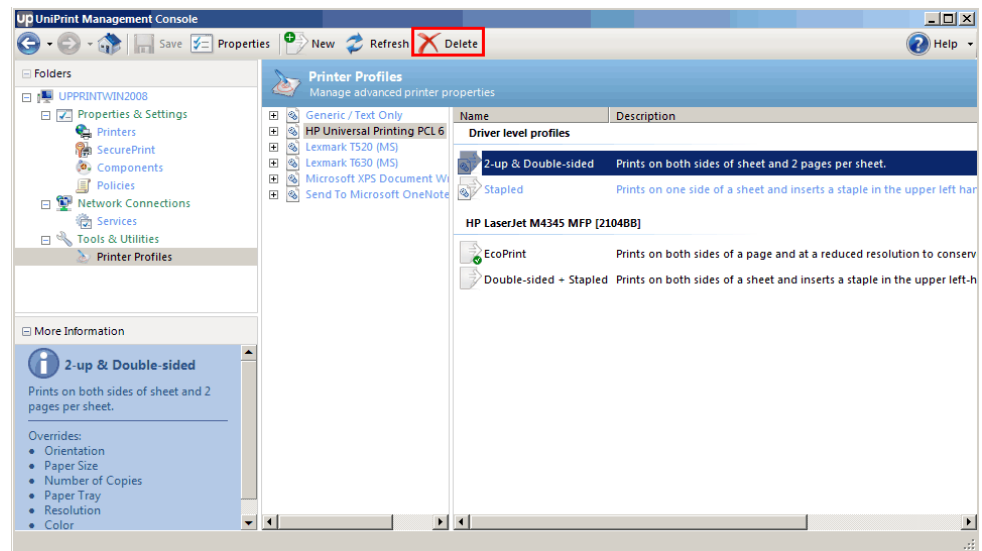
Deleting a Printer Profile

1. On the UniPrint Print Server, open the **UniPrint Management Console**.

2. Under **Tools & Utilities**, click **Printer Profiles**.

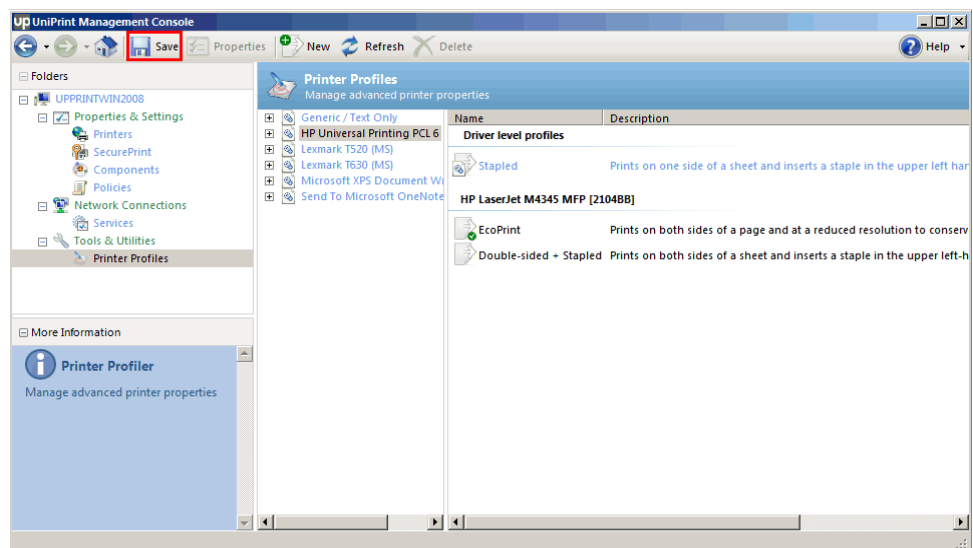


3. Click to select a printer profile to delete and then click **Delete**.



4. Click **Yes** to confirm that you want to delete this profile.

5. Click **Save**.



Configuring UniPrint Application Server

From the UniPrint Application Server, UniPrint printer properties can be configured globally for all users, prioritize the usage of group policies and set which UniPrint features your users will have access to in their sessions. The Adobe Plug-in can also be configured to replace the Print function in Adobe Reader/Acrobat to Print to UniPrint.

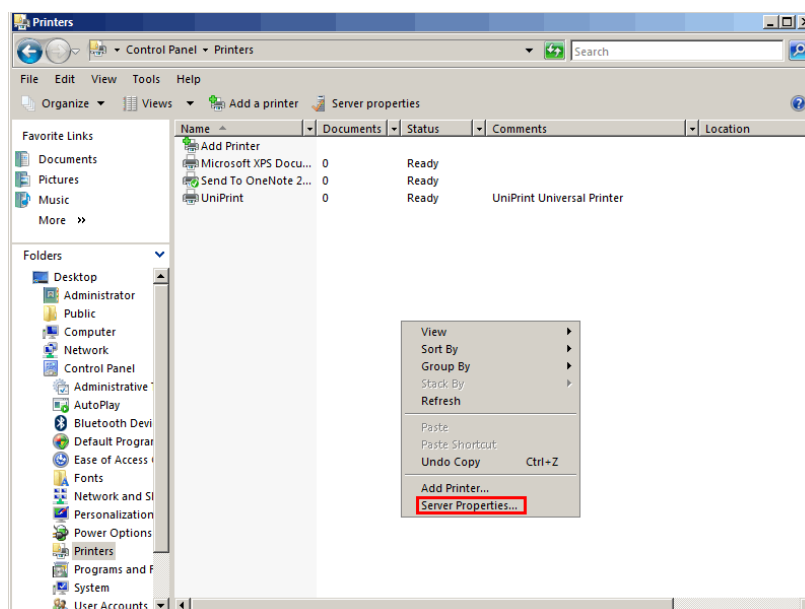
Preparing UniPrint for Custom Forms

Custom forms, for example labels and invitation cards, are not available in standard paper sizes. These non-standard paper sizes need to be defined on the application server prior to printing to them.

Defining a custom form on the application (Citrix/RDS) server

Before you can use custom forms, they need to be first defined on the application server.

1. Click **Start**, click **Control Panel** and then click **Printers**.
2. Right-click anywhere within the white space and then select **Server Properties**.



3. Select **Create a new form**.

Print Server Properties

Forms | Ports | Drivers | Advanced

Forms on: UPAPPWIN2008

10x11
10x14
11x17
12x11

Delete

Save Form

Form name: 10x11

☐ Create a new form

Define a new form by editing the existing name and measurements. Then click Save Form.

Form description (measurements)

Units: ☐ Metric ☒ English

Paper size:

Width: 10.00in

Height: 11.00in

Printer area margins:

Left: 0.00in

Top: 0.00in

Right: 0.00in

Bottom: 0.00in

OK Cancel Apply

4. Enter a **Form name** and the appropriate measurements.

Print Server Properties

Forms | Ports | Drivers | Advanced

Forms on: UPAPPWIN2008

10x11
10x14
11x17
12x11

Delete

Save Form

Form name: EventCard 2.5 x 3.5

☒ Create a new form

Define a new form by editing the existing name and measurements. Then click Save Form.

Form description (measurements)

Units: ☐ Metric ☒ English

Paper size:

Width: 2.5

Height: 3.5

Printer area margins:

Left: 0.00in

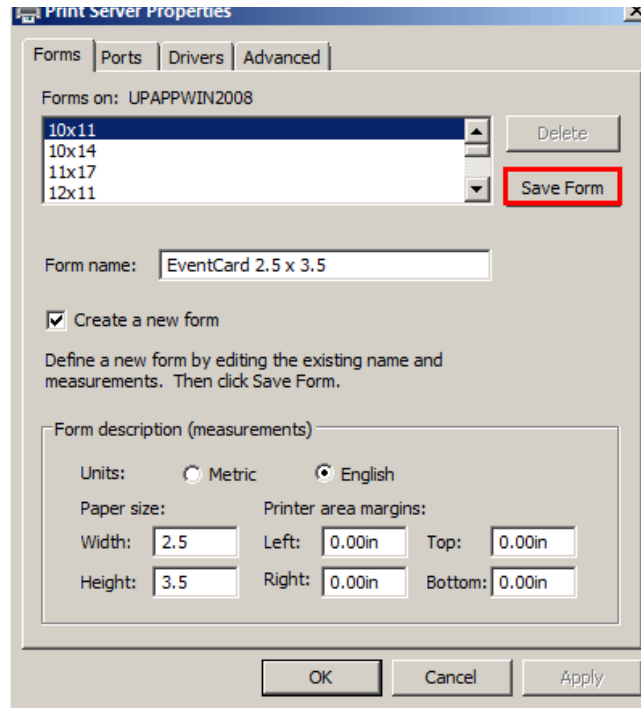
Top: 0.00in

Right: 0.00in

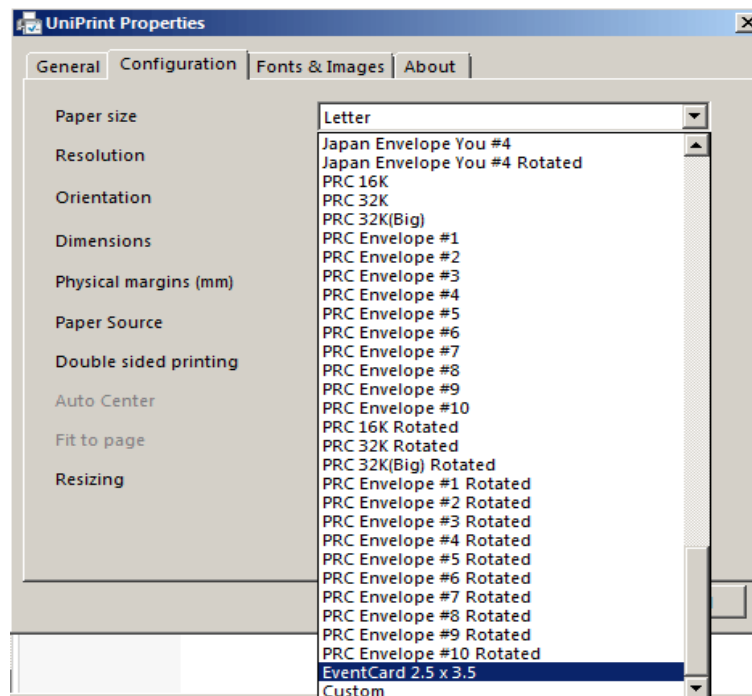
Bottom: 0.00in

OK Cancel Apply

5. Click **Save Form** to create the custom form.

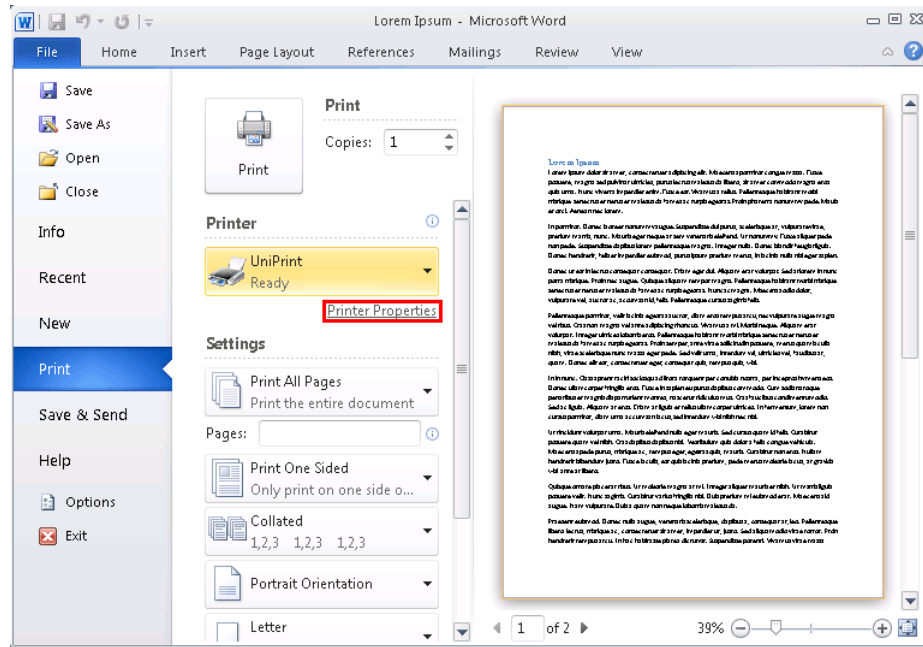


Once the custom form is defined on the application server, it will be available in UniPrint printer **Paper Size** list.

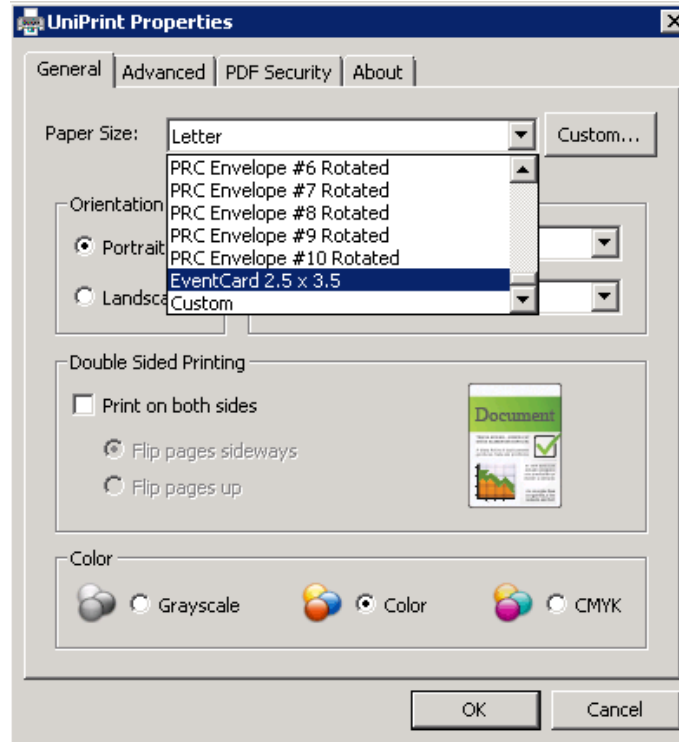


Using a Custom Form in a User Session

1. Log on to your application server and open an application, for example Microsoft Word.
2. Ensure that **UniPrint** is selected from the printer list and then click **Printer Properties**.



3. From the **Paper Size** list, select the custom form that was defined on the terminal server.

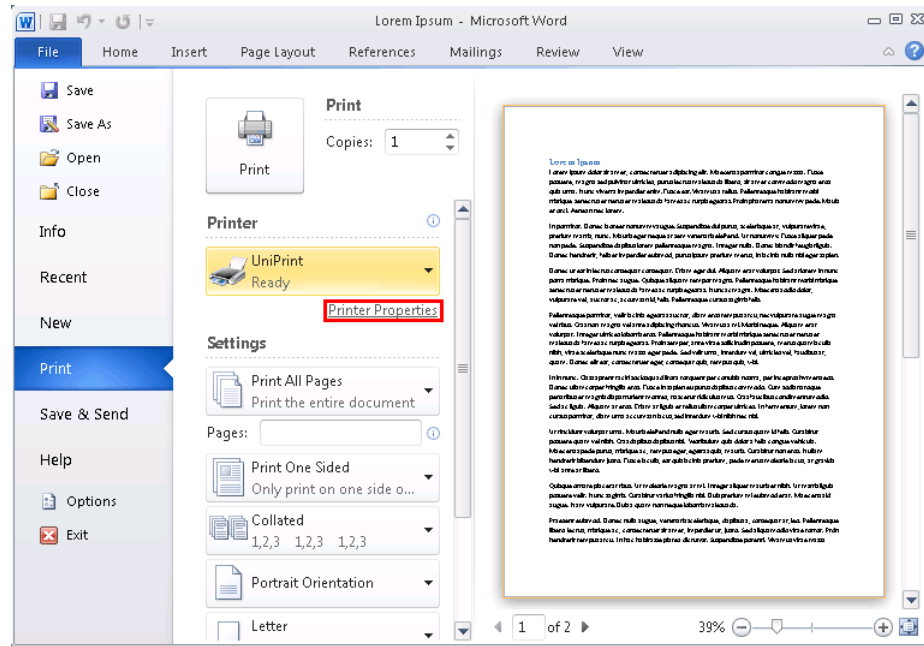


4. Click **OK**.

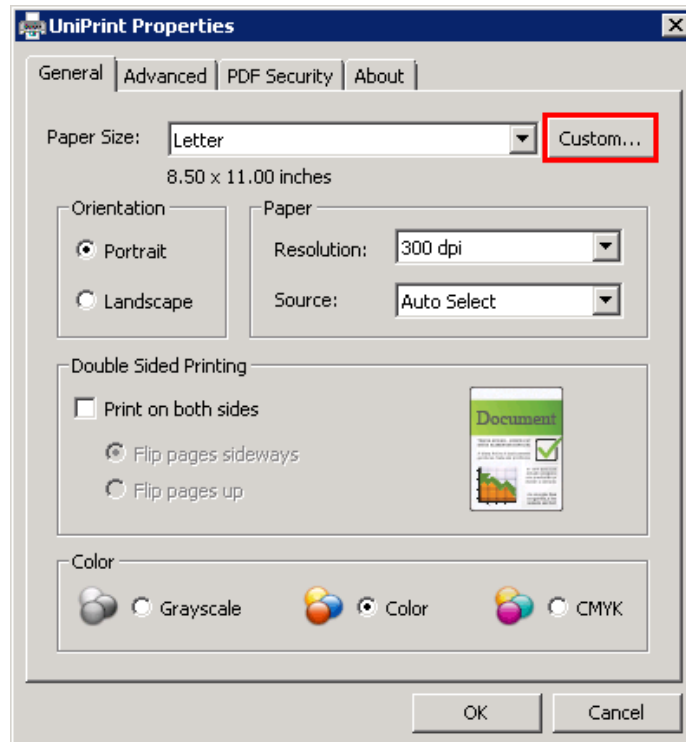
Defining a Custom Form in a User Session

1. Log on to your application server and open an application, for example Microsoft Word.

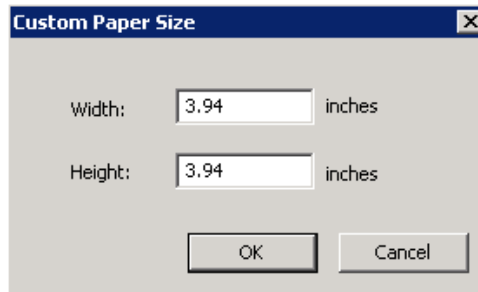
2. Ensure that **UniPrint** is selected from the printer list and then click **Printer Properties**.



3. Click **Custom**.



- Specify the **Width** and **Length** and then click **OK**.

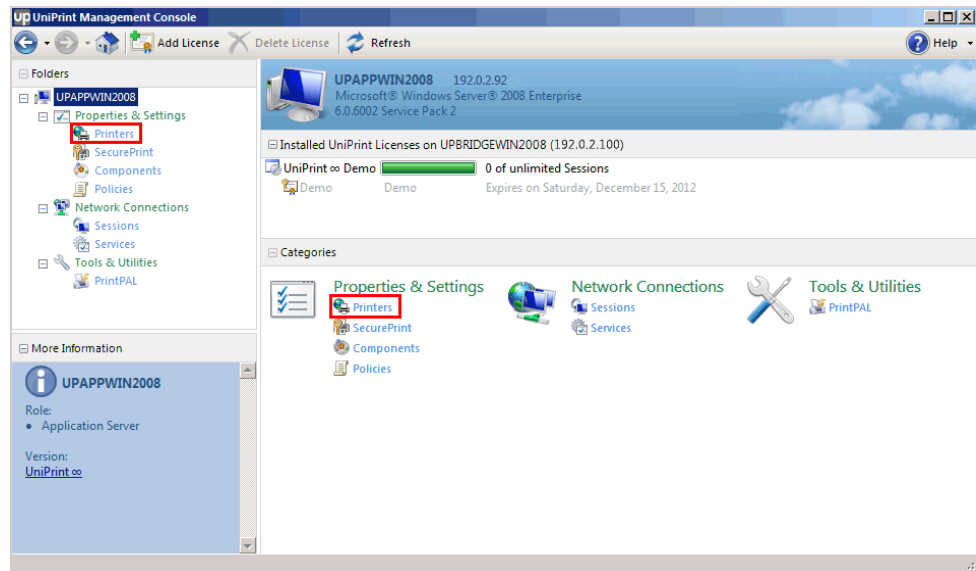


- Click **OK**.

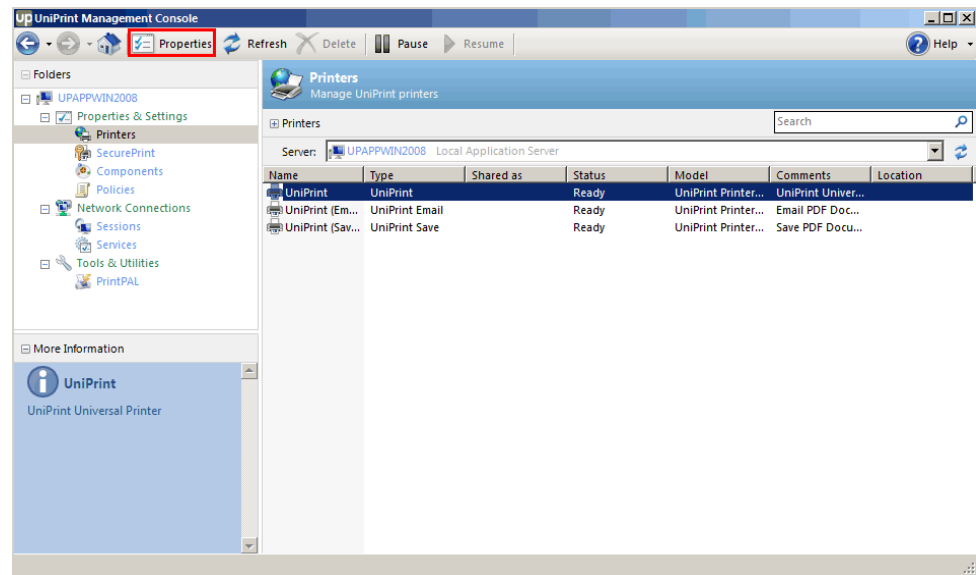
Changing UniPrint Printer Properties Globally For All Users

To set UniPrint printer properties globally for all users who logon to this server, do the following:

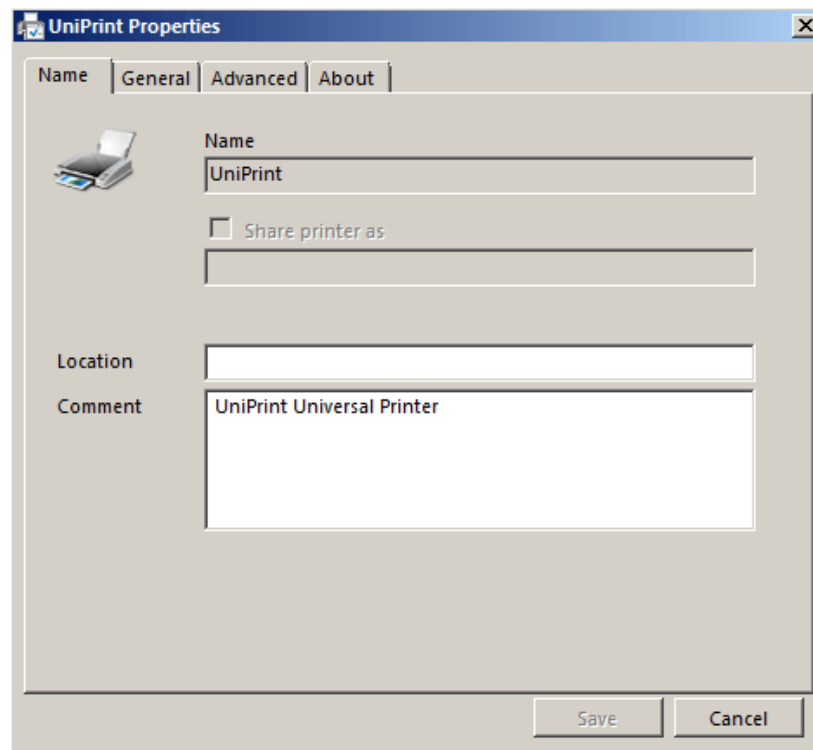
- On the UniPrint Application Server, click **Start, All Programs, UniPrint Suite** and then click **UniPrint Management Console**.
- Under **Properties & Settings**, click **Printers**.



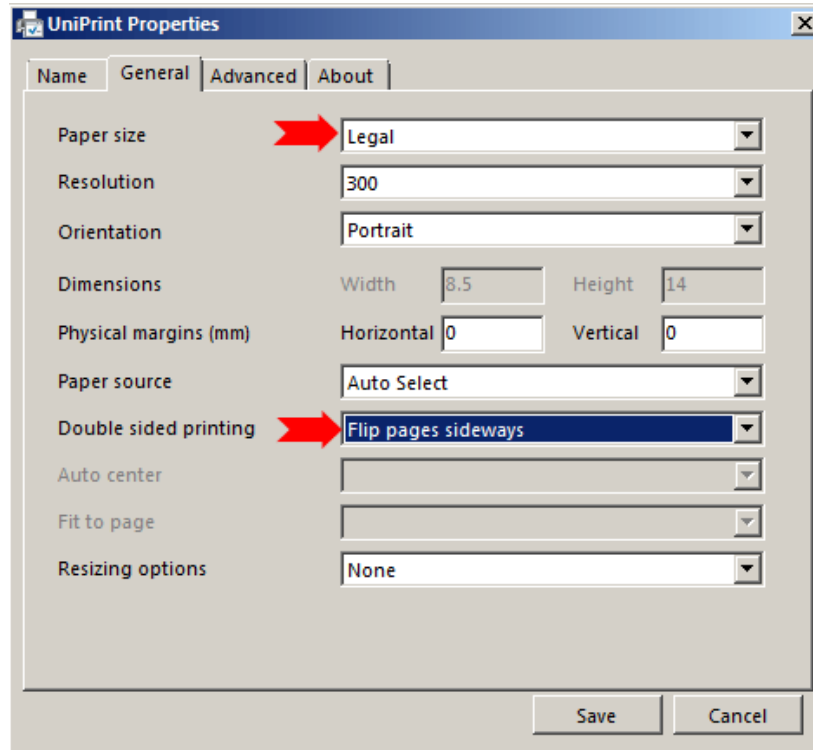
3. Click to select **UniPrint** and then click **Properties**.



4. Click either the **General** or **Advanced** tab.



5. Change the desired properties, for example **Page size** and **Double-sided printing**, and then click **Save**.



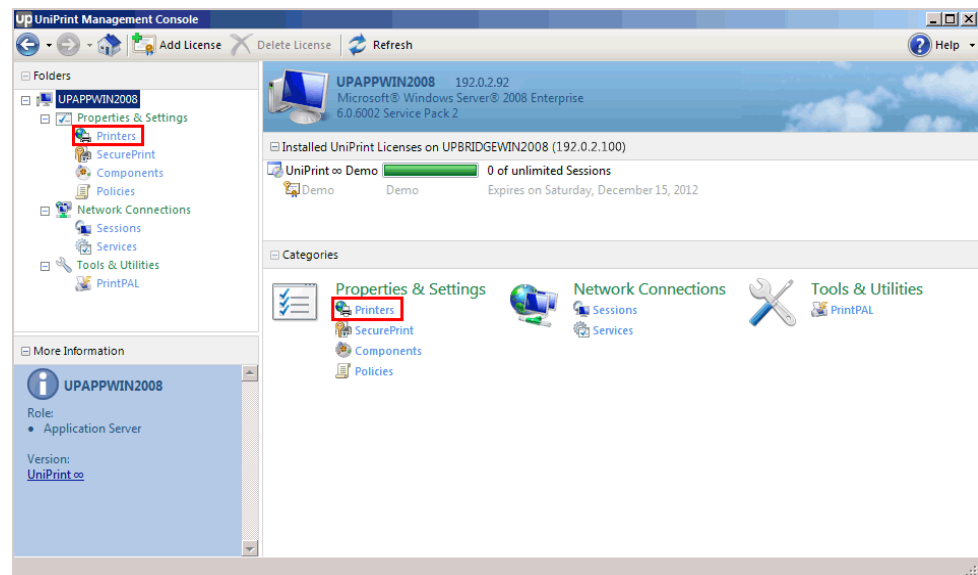
Copying UniPrint Printer Properties to Another Application Server

After configuring the UniPrint printer properties on one application server, those properties can then be copied to other application servers.

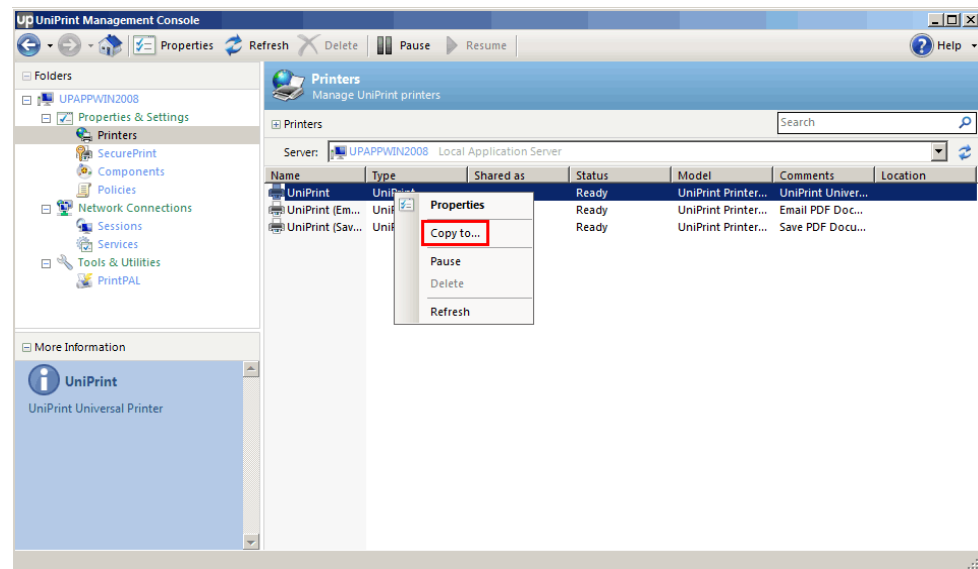
To copy UniPrint printer properties to other application servers, do the following:

1. On the UniPrint Application Server, open the **UniPrint Management Console**.

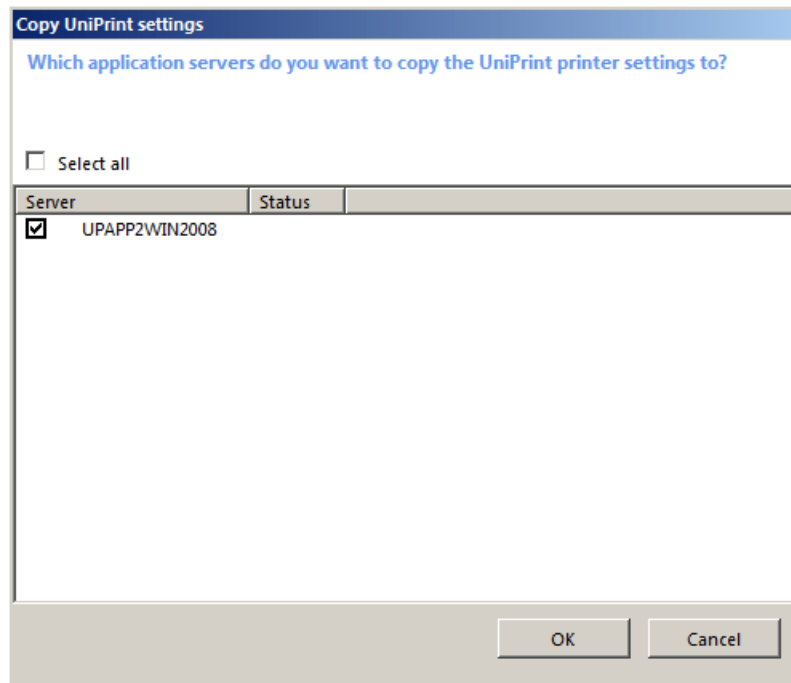
2. Under **Properties & Settings**, click **Printers**.



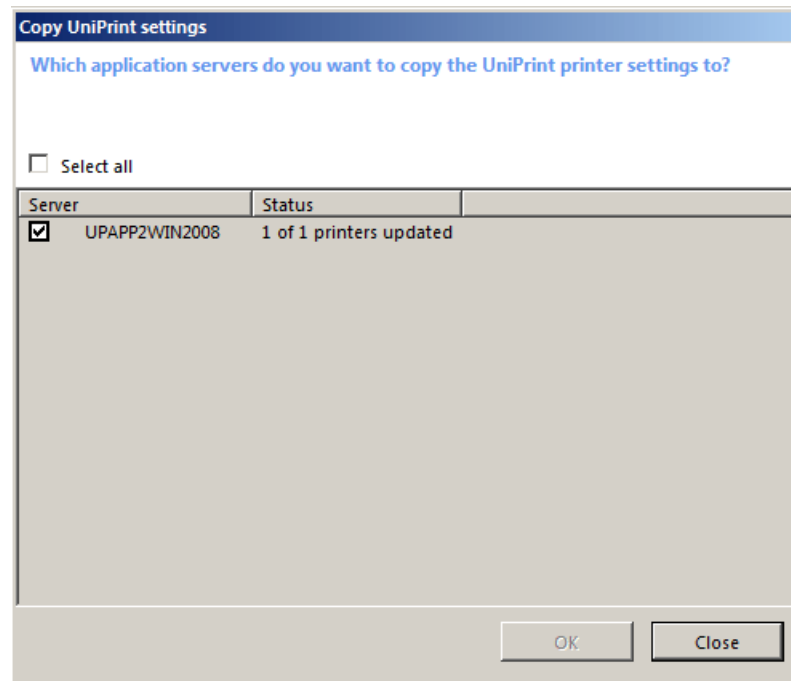
3. Right-click the **UniPrint** and then select **Copy to**.



4. Select the application server(s) to which you want to copy UniPrint printer properties and then click **OK**.



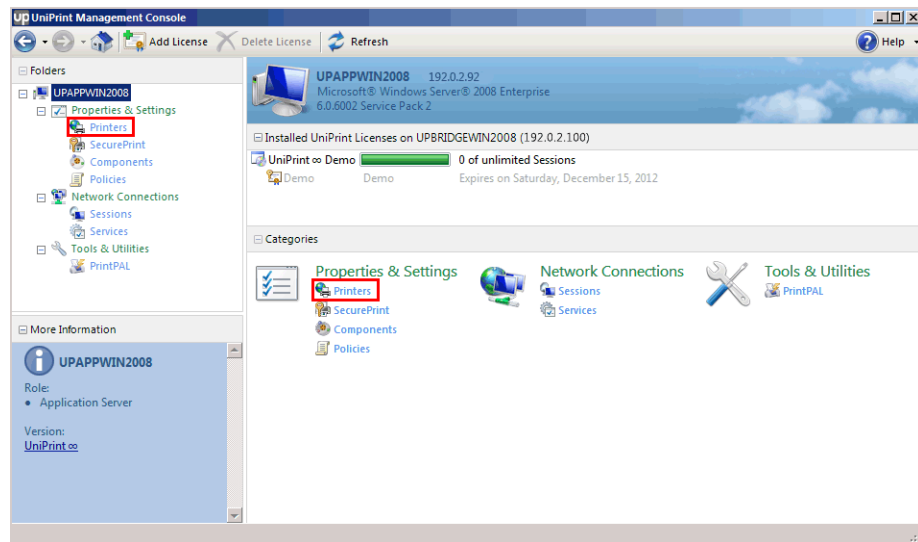
5. Enter administrative credentials and then click **OK**.
6. UniPrint printer properties will be copied to the selected application server(s). Click **Close**.



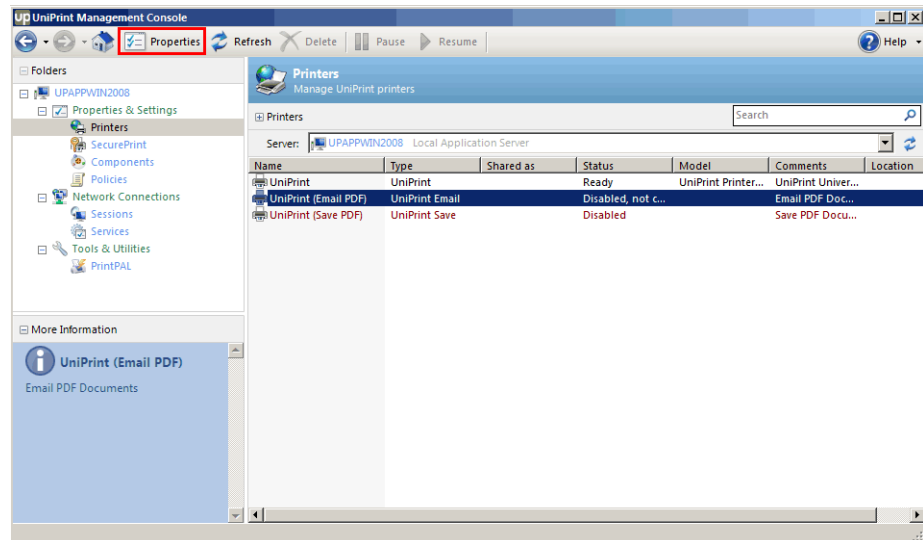
Enabling & Configuring UniPrint To E-mail Print Jobs as PDF Attachments

To enable UniPrint to e-mail a print job as a PDF attachment from the UniPrint Application Server, do the following:

1. On the UniPrint Application Server, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **Printers**.



3. Click to select the **UniPrint (Email PDF)** queue and then click **Properties**.



4. To use the default Messaging API client, select **Use default MAPI client** or enter the **Mail Server** address and port number that will be used to send out e-mail. If the mail server requires authentication, select **Server requires authentication**.

The screenshot shows the 'UniPrint (Email PDF) Properties' dialog box with the 'Email' tab selected. The 'Use default MAPI client' checkbox is highlighted with a red rectangle. Below it, the 'Mail Server' field contains 'smtp.mycompany.com' and the port field contains '25'. The 'Server requires authentication' checkbox is unchecked. There are input fields for 'Username', 'Password', and 'Confirm'. The 'Send as' field is labeled 'Mandatory field'. A blue note states: 'An attempt will be made to retrieve the user's email address from Active Directory, however, in case of unavailability, the address specified here will be used.' At the bottom, there is a 'Test' button and a message: 'To confirm your email configuration by sending a test message, click the Test button.' The dialog box has a yellow status bar at the bottom with a warning icon and the text 'Incomplete...'. There are 'Save' and 'Cancel' buttons at the bottom right.



NOTE: As of this release, there is no Windows 8 MAPI application and Windows 8 users will not be able to send e-mail attachments in this manner. For information see <http://social.technet.microsoft.com/Forums/en-US/W8ITProPreRel/thread/0ddc6e71-af56-4f98-a186-4b23f9071154>.

5. Enter the **Username** and the **Password** twice.

The screenshot shows the 'UniPrint (Email PDF) Properties' dialog box with the 'Email' tab selected. The 'Mail Server' is set to 'smtp.mycompany.com' and the port is '25'. The 'Server requires authentication' checkbox is checked. The 'Username', 'Password', and 'Confirm' fields are empty. The 'Send as' field is set to 'Mandatory field'. A blue note states: 'An attempt will be made to retrieve the user's email address from Active Directory, however, in case of unavailability, the address specified here will be used.' A 'Test' button is at the bottom right. A yellow warning bar at the bottom says 'Incomplete...'. 'Save' and 'Cancel' buttons are at the bottom right.

UniPrint (Email PDF) Properties

Name General Advanced **Email** About

☐ Use default MAPI client

Mail Server: smtp.mycompany.com : 25

☒ Server requires authentication

Username:

Password:

Confirm:

Send as: Mandatory field

An attempt will be made to retrieve the user's email address from Active Directory, however, in case of unavailability, the address specified here will be used.

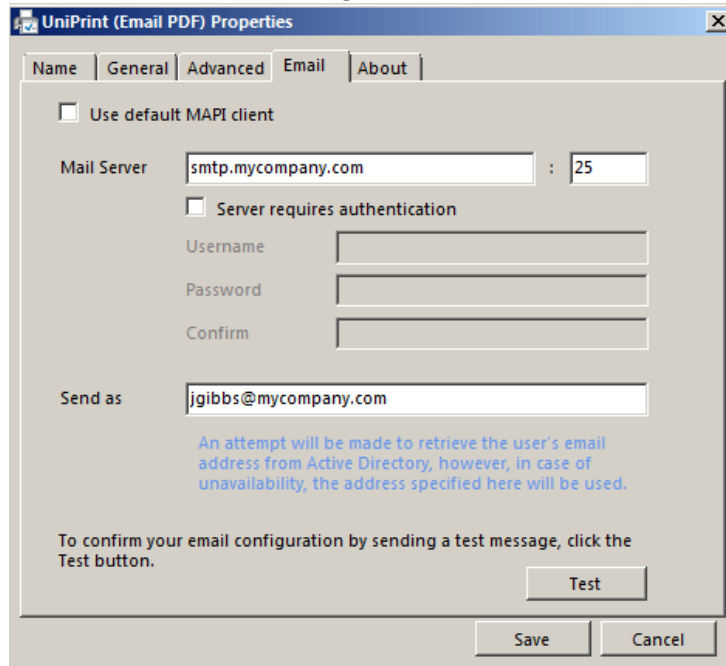
To confirm your email configuration by sending a test message, click the Test button.

Test

! Incomplete...

Save Cancel

6. Enter the e-mail address that will appear in the **From** field and then click **Test** to test these settings.

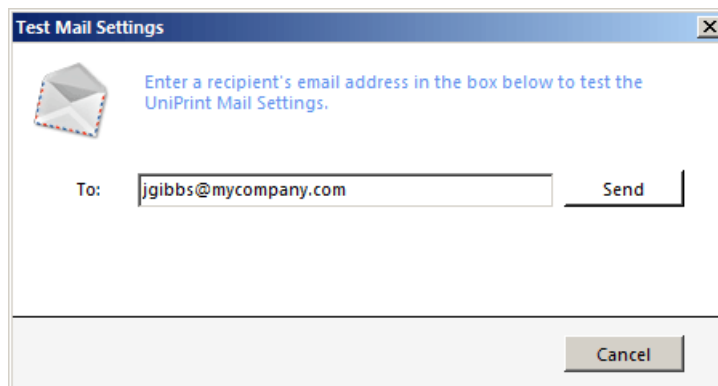


The image shows the 'UniPrint (Email PDF) Properties' dialog box with the 'Email' tab selected. The 'Mail Server' is set to 'smtp.mycompany.com' and the port is '25'. The 'Server requires authentication' checkbox is unchecked. The 'Send as' field is set to 'jgibbs@mycompany.com'. A blue note states: 'An attempt will be made to retrieve the user's email address from Active Directory, however, in case of unavailability, the address specified here will be used.' At the bottom, there is a 'Test' button and 'Save' and 'Cancel' buttons.



NOTE: If the user is a domain user and the **Display name** and **E-mail** fields have been populated in Active Directory, then UniPrint will display the address from Active Directory User properties instead of the default address set in **Send as**.

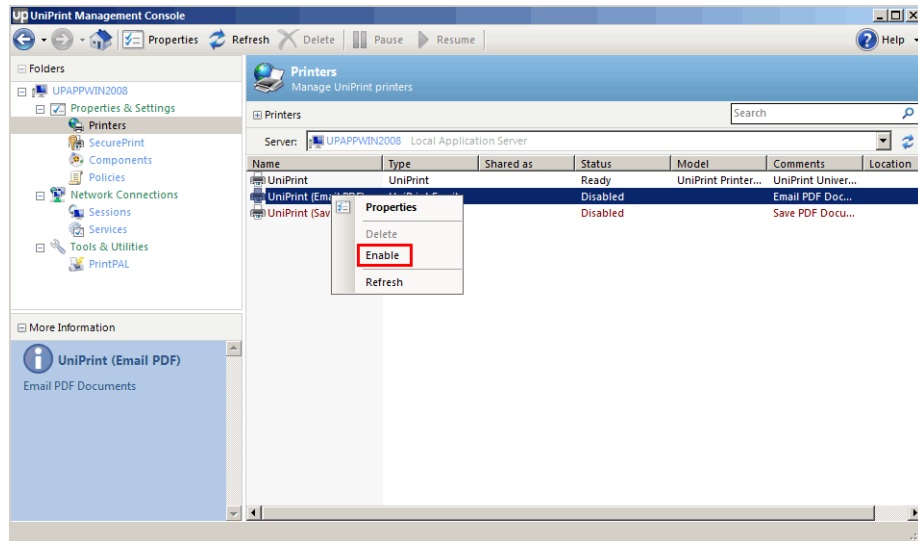
7. Enter an e-mail address and then click **Send**.



The image shows the 'Test Mail Settings' dialog box. It contains a text box for entering a recipient's email address, with the example 'jgibbs@mycompany.com' entered. To the right of the text box is a 'Send' button. At the bottom right is a 'Cancel' button. A blue note at the top says: 'Enter a recipient's email address in the box below to test the UniPrint Mail Settings.'

8. Click **OK** to clear the message box and then click **Save**.

9. To enable the **UniPrint (Email PDF)** queue, right-click it and then select **Enable**. *Note: This option will not appear in the right-click menu unless the Email tab has been correctly configured.*



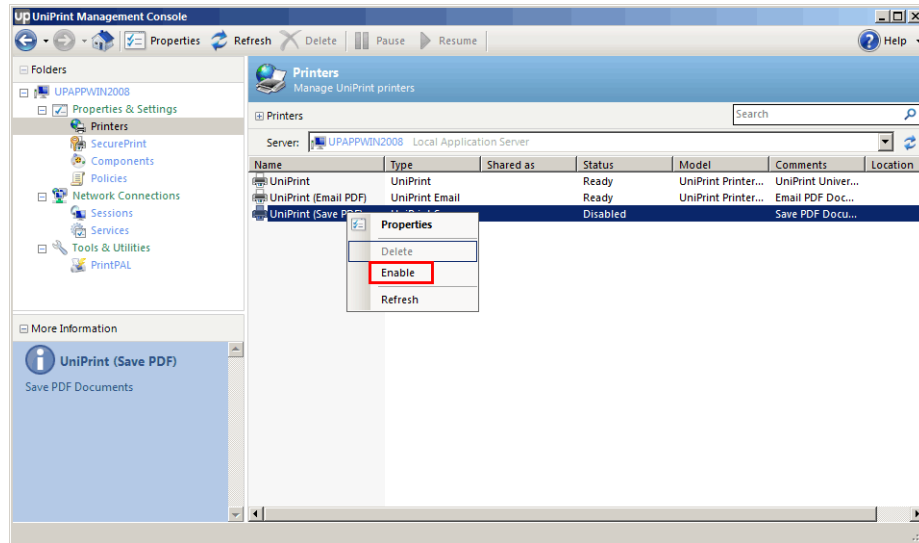
10. Click **Yes** to restart the UniPrint Control Service.

Enabling UniPrint To Save Print Jobs As PDF Files

To allow users to save their print jobs as PDF files to any network accessible location, do the following:

1. On the UniPrint Application Server, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **Printers**.

3. Right-click **UniPrint (Save PDF)** and then select **Enable**.



4. Click **Yes** to restart the UniPrint Control Service.

Enabling & Setting Order of Precedence of Group Policy Objects

Administrators can configure how UniPrint applies configuration settings from alternate sources on all UniPrint component servers. Alternate sources include: Active Directory group policy and saved user preferences.

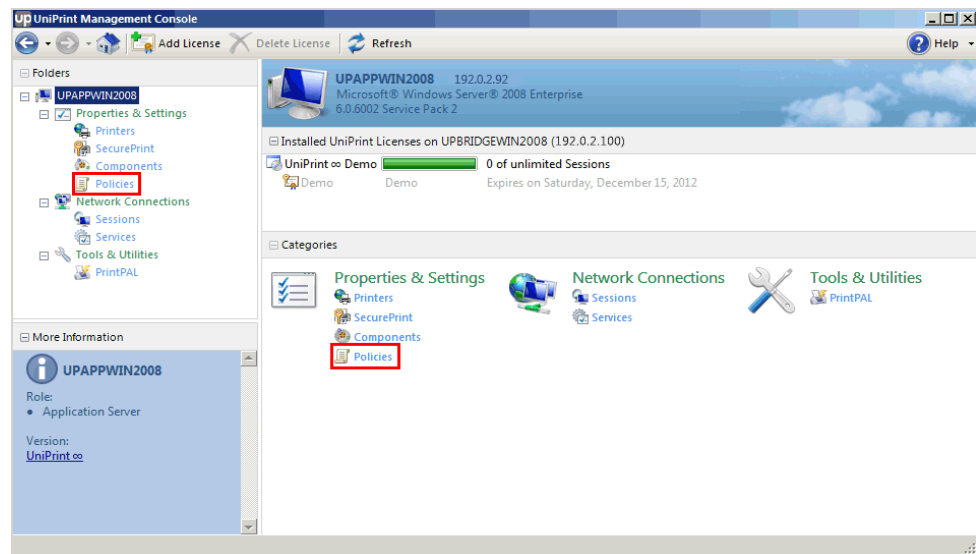
The following figures shown are taken from the UniPrint Application Server, however the instructions can also be applied to the UniPrint Bridge and the UniPrint Print Server.

Enabling Policies

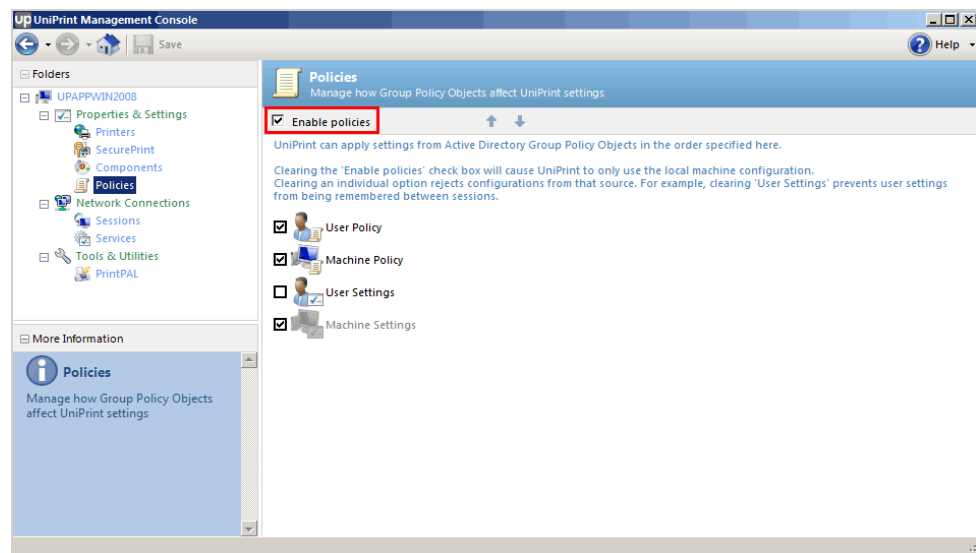
To enable different policy sources, do the following:

1. On a UniPrint component server, open the **UniPrint Management Console**.

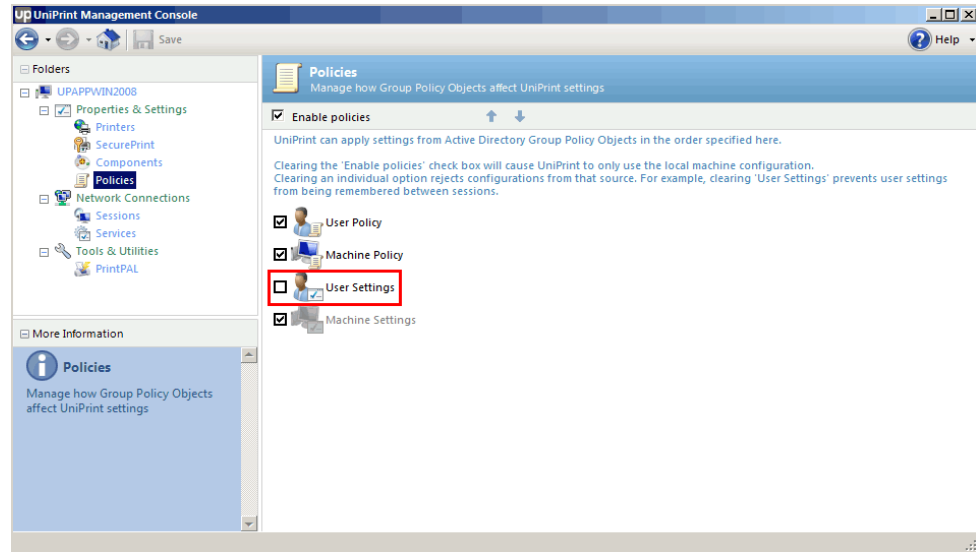
2. Under **Properties & Settings**, click **Policies**.



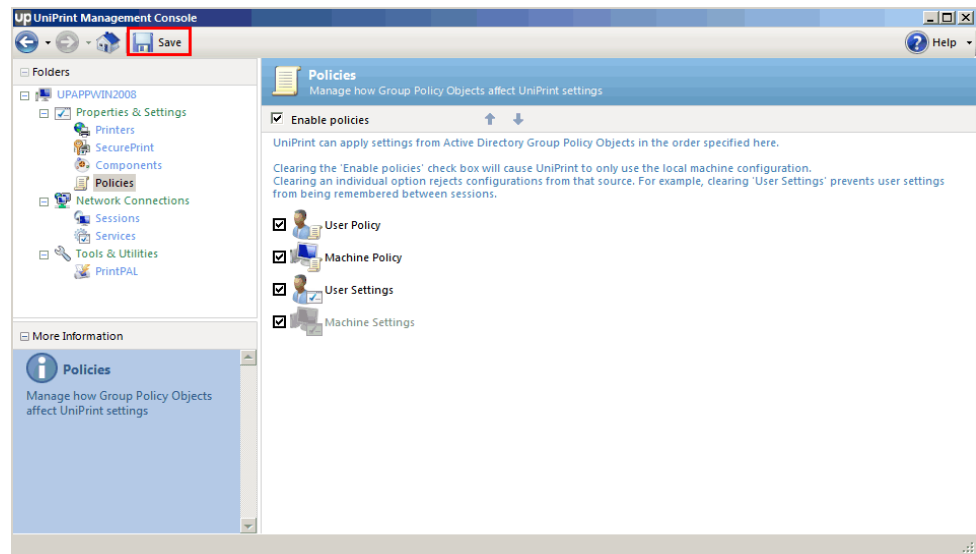
3. Ensure that **Enable policies** is selected.



4. Click to select a policy to enable, or clear a check box to disable a policy

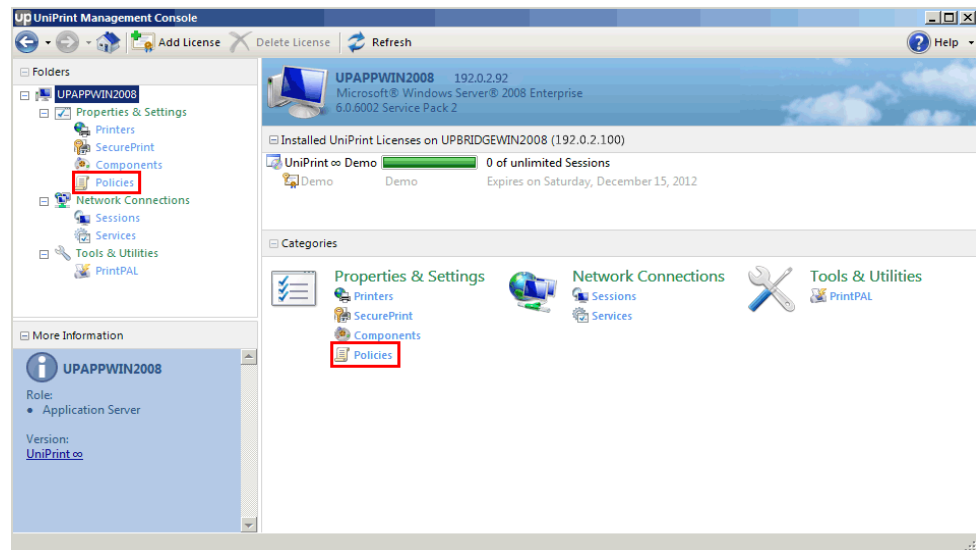


Configuration Source	Description
User Policy	Configuration settings for specific users or user groups through Active Directory group policy. This policy is only applicable to the UniPrint Application Server.
Machine Policy	Configuration settings for specific UniPrint components through Active Directory group policy.
User Settings	Settings configured by users will be persistent across multiple ICA/RDP sessions. These settings include: Orientation, Page Size, Resolution, Paper Source and Double sided printing. They may, however, be overridden by a group policy listed higher in the processing order. This policy is only applicable to the UniPrint Application Server.
Machine Settings	Default settings configured from the UniPrint Management Console. These settings cannot be disabled and always have the lowest priority. To enforce machine settings, clear all other alternate source check boxes.

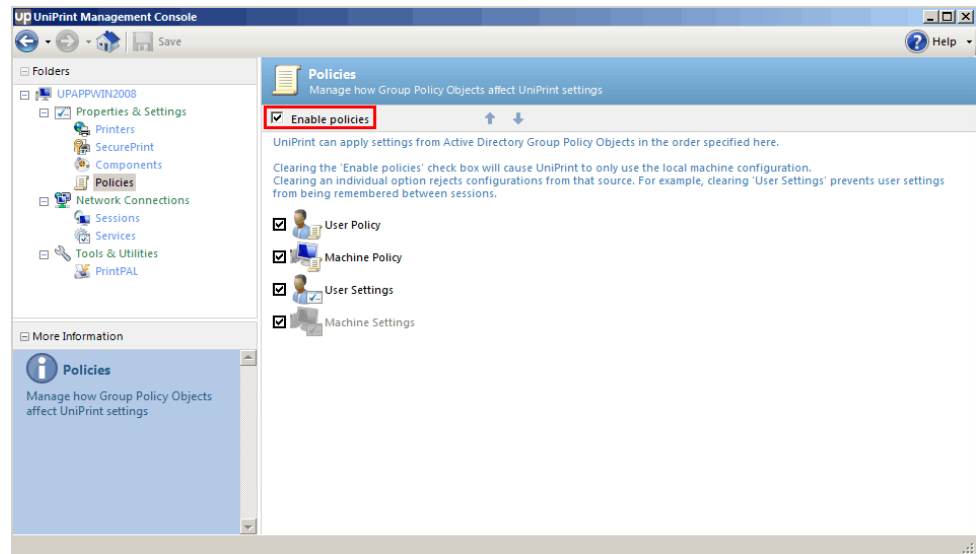
5. Click **Save**.***Forcing UniPrint to Apply Settings Only From The UniPrint Management Console***

To force UniPrint to use settings from the UniPrint Management Console, do the following:

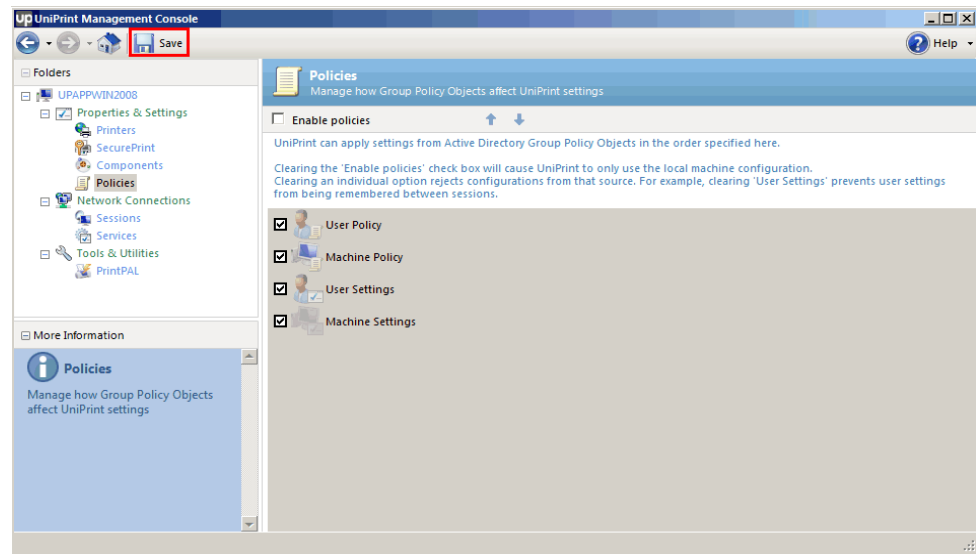
1. On a UniPrint component server, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **Policies**.



3. Clear **Enable** policies.



4. Click **Save**.

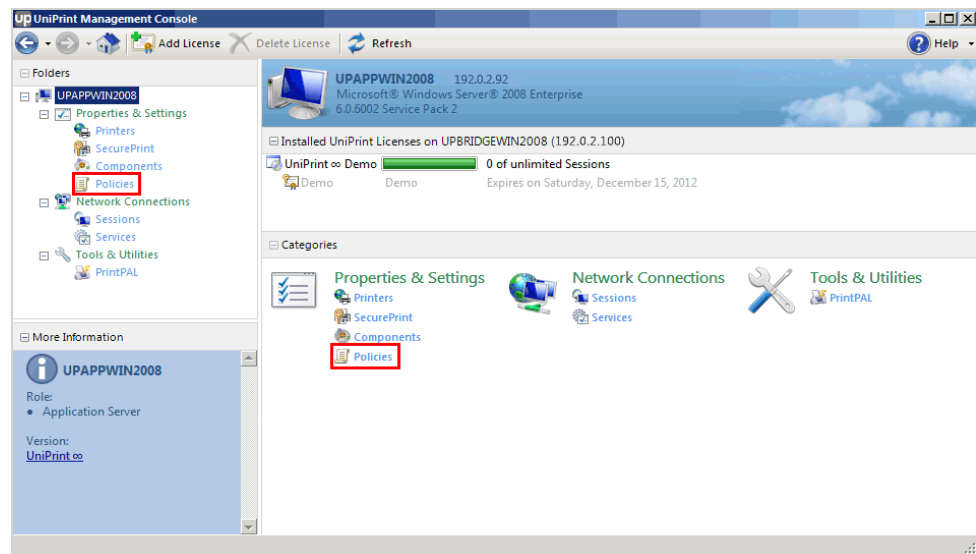


Changing the Order of Precedence

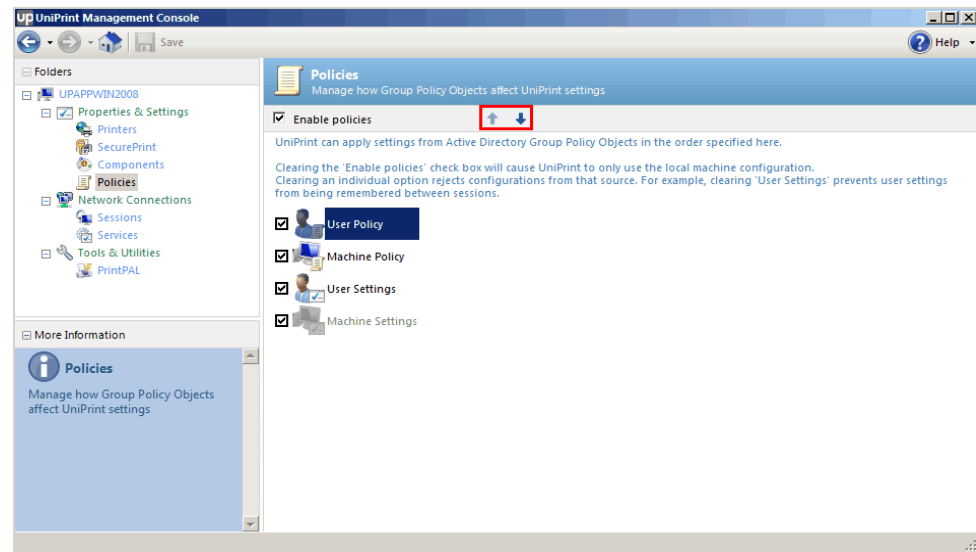
You can change the order in which configuration settings are applied. The settings at the top of the list will always override the ones set below them. To change order of precedence, do the following:

1. On a UniPrint component server, open the **UniPrint Management Console**.

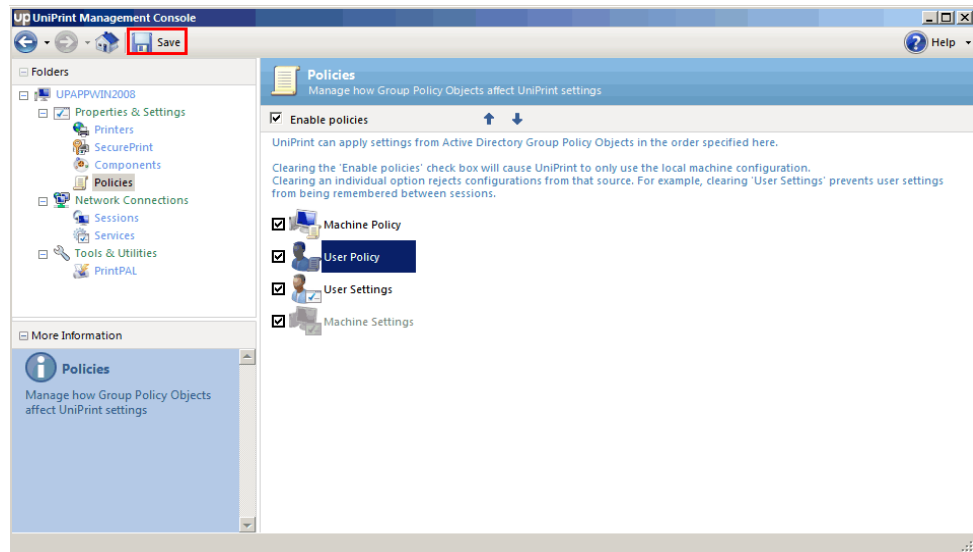
2. Under **Properties & Settings**, click **Policies**.



3. Click to select a policy and then click either the **UP** or **DOWN** arrow.



4. Click **Save**.



Enabling UniPrint Session Features

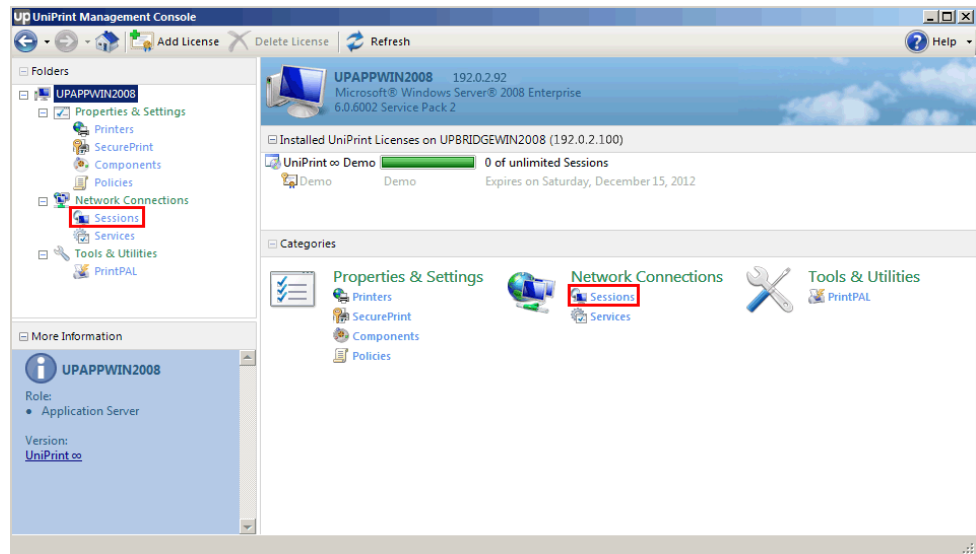
Setting Which Protocols Are Used To Transfer Print Jobs To The UniPrint Client

Based on the connecting client's protocol, UniPrint creates a private, protocol-specific virtual channel between the application server and the client device for transferring rendered print jobs.

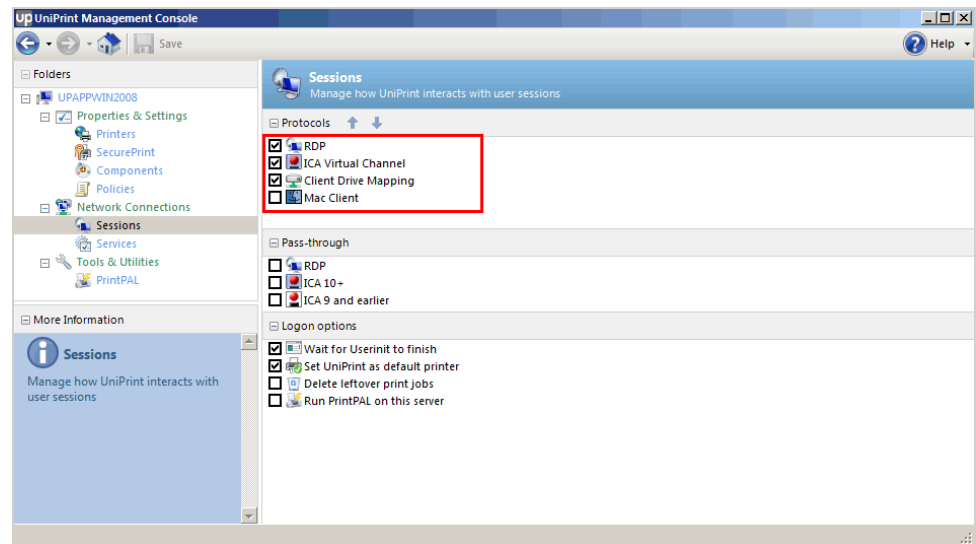
To enable the creation of a specific virtual channel, do the following:

1. On the UniPrint Application Server, open the **UniPrint Management Console**.

2. Under **Network Connections**, click **Sessions**.



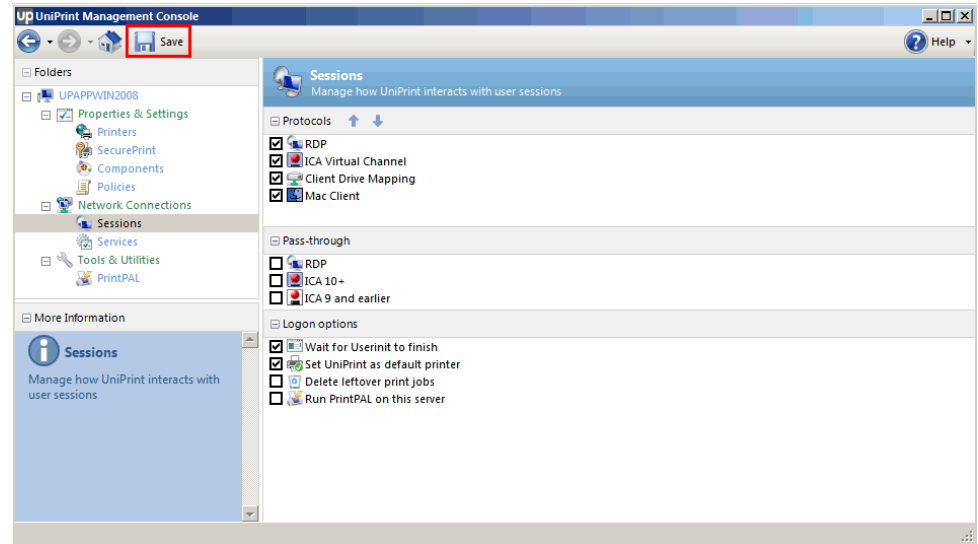
3. Click to select a protocol or transfer method.



Protocol	Description/Notes
RDP	Remote Desktop Protocol. RDP does not require Citrix to be installed on the application server.
ICA Virtual Channel	Citrix Independent Computing Architecture. ICA does not require client drive mapping to be enabled on the Citrix server.
Client Drive Mapping	Requires client drive mapping to be enabled on the Citrix server and is compatible with both Windows and non-Windows clients.

Protocol	Description/Notes
Mac Client	Allows a Macintosh computer to access an application server.

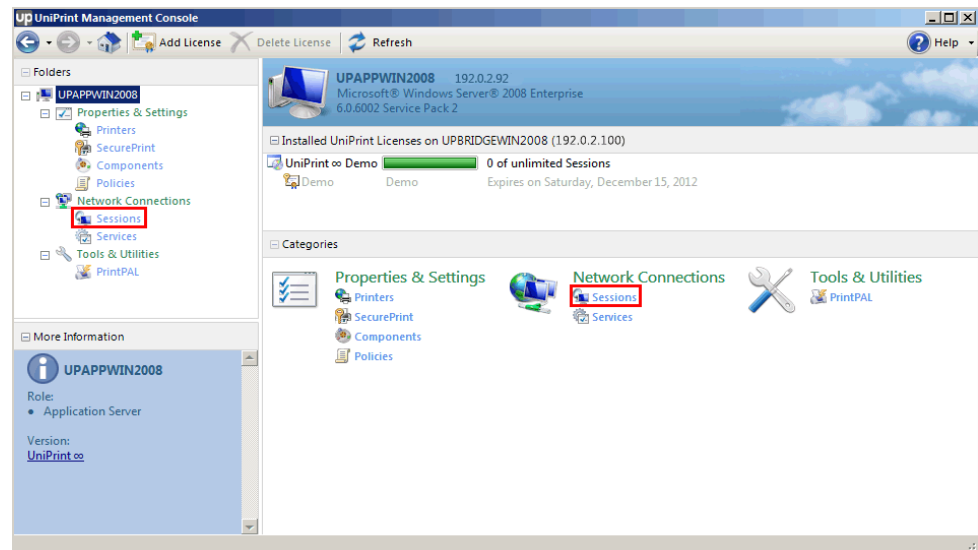
4. Click **Save**.



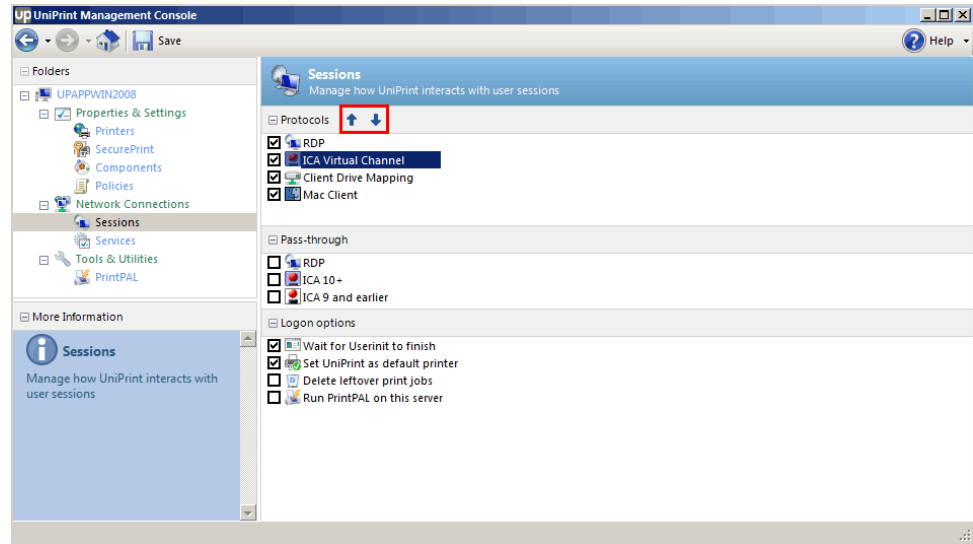
Changing the Order That UniPrint Uses For Auto-detecting Transfer Protocols

To change the order UniPrint uses when auto detecting the transfer protocol, do the following:

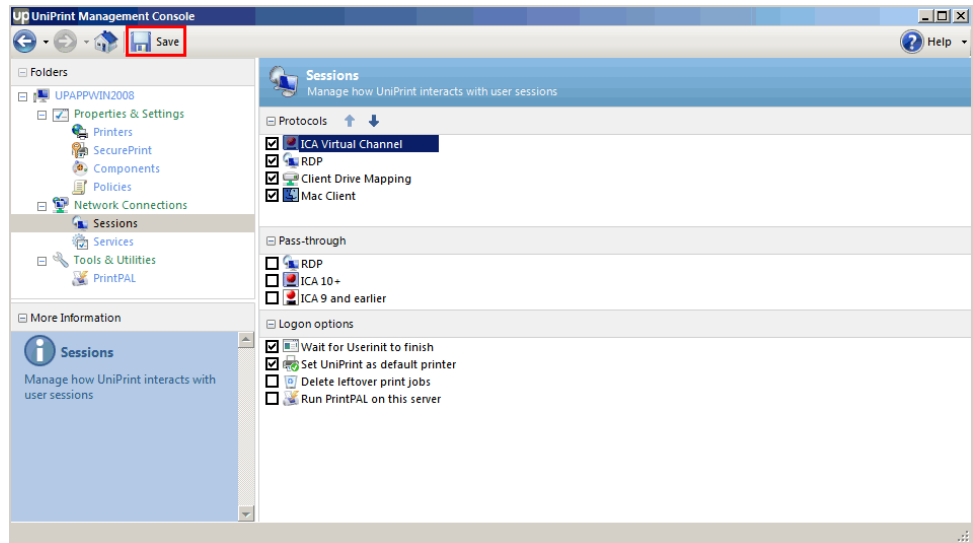
1. On the UniPrint Application Server, open the **UniPrint Management Console**.
2. Under **Network Connections**, click **Sessions**.



- Click to select a protocol to promote or demote and then click the **UP** or **DOWN** arrows.



- Click **Save**. Only the first detected transfer protocol is used.

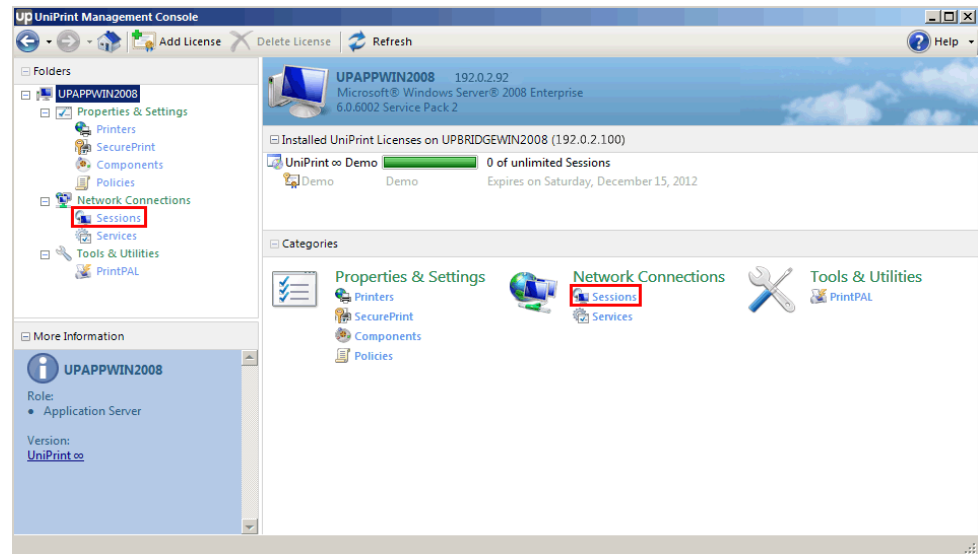


Setting This Terminal Server As A Pass-through Client

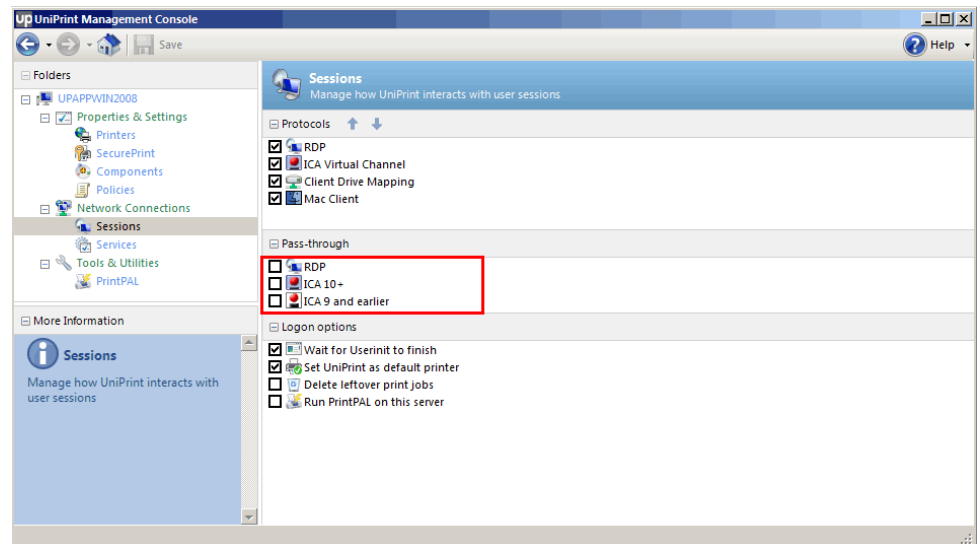
UniPrint can be configured such that this application server will act as a pass-through client, routing print jobs printed from another application server that has UniPrint Application Server installed. As a pass-through client, UniPrint spools print jobs through nested ICA/RDP sessions where users connect from one ICA/RDP session to another by launching a second ICA/RDP session within their original session. Pass-through printing allows UniPrint to send print jobs seamlessly through multiple ICA/RDP sessions back to the first client workstation in the chain.

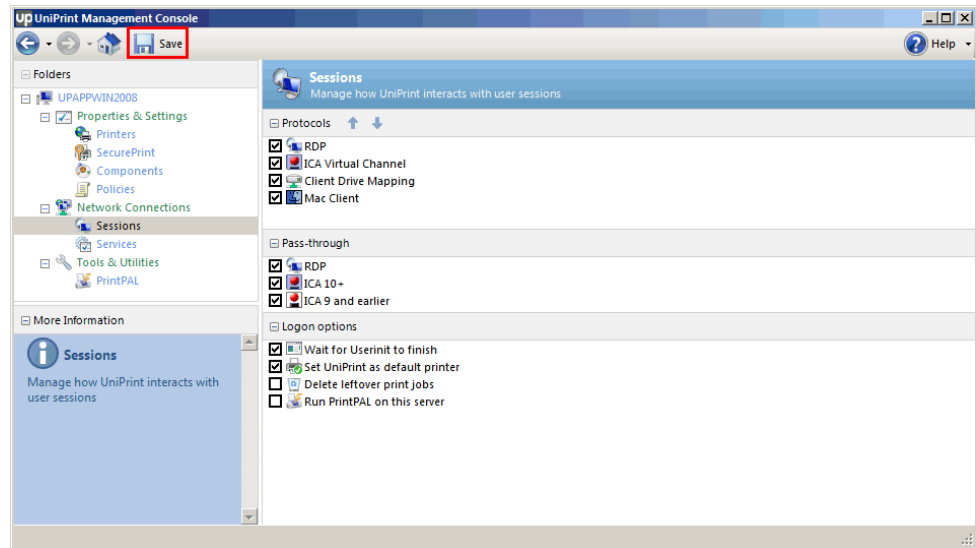
To configure this application server to act as a pass-through client, do the following:

1. On the UniPrint Application Server, open the **UniPrint Management Console**.
2. Under **Network Connections**, click **Sessions**.



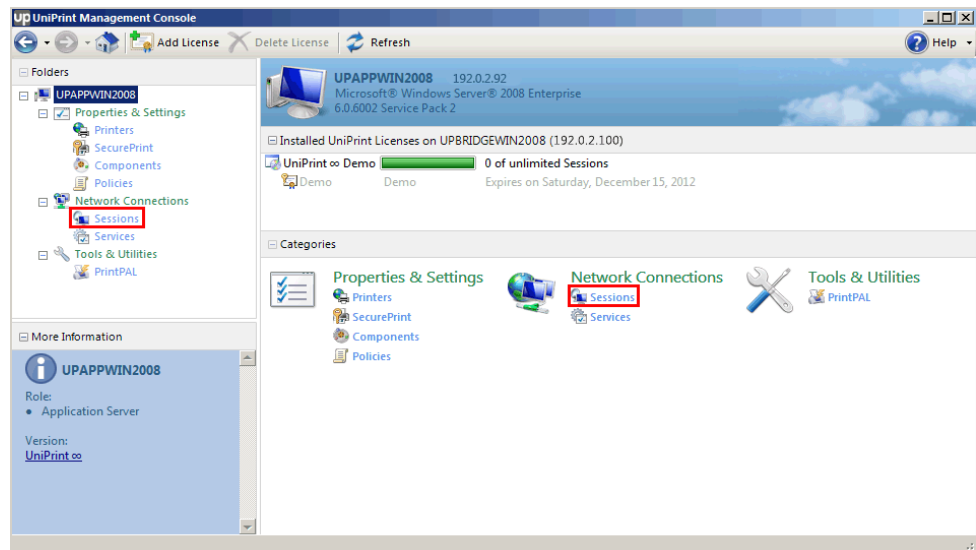
3. Click to select the protocols that user's use to connect to this application server.



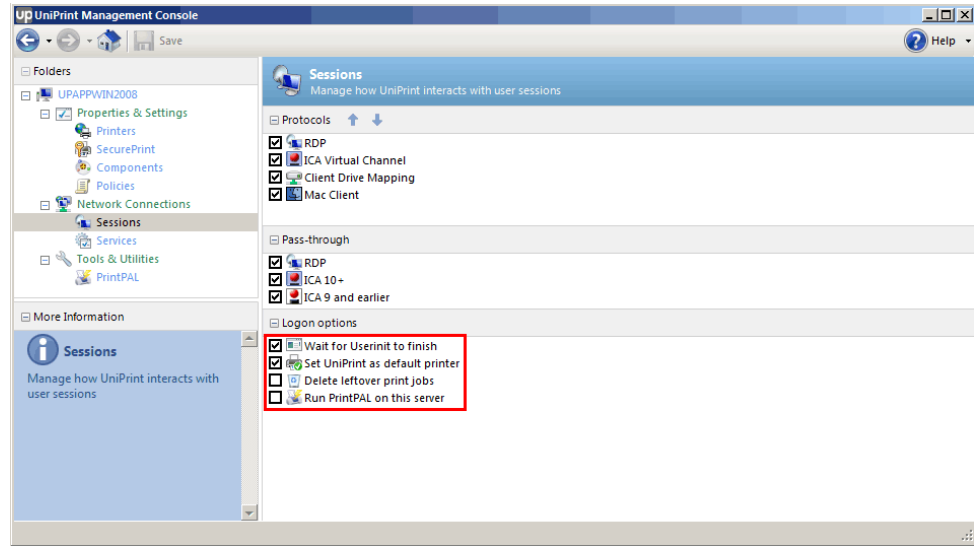
4. Click **Save**.***Setting Session Logon Features***

To select which actions are performed when a user launches a session, do the following:

1. On the UniPrint Application Server, open the **UniPrint Management Console**.
2. Under **Network Connections**, click **Sessions**.

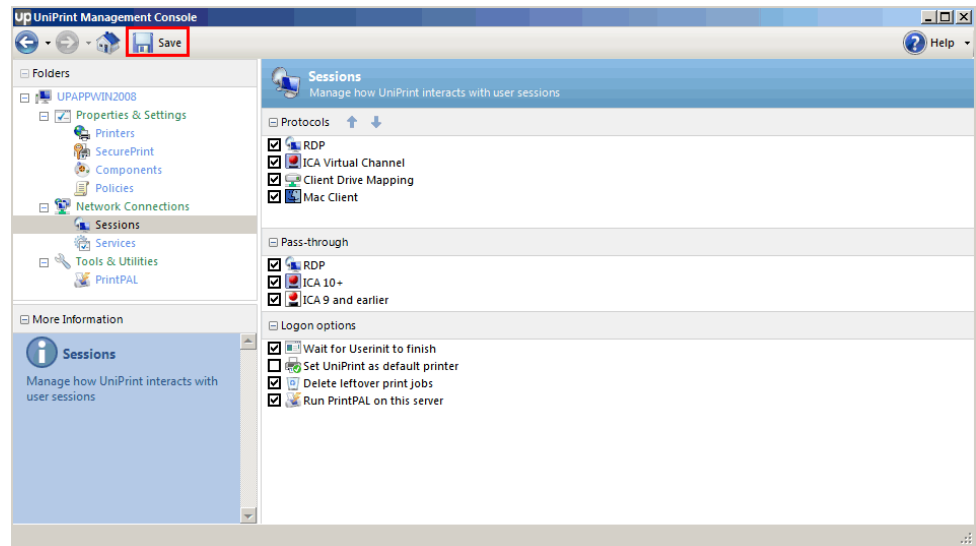


- Click to select the actions you want performed when a session is initiated.



Option	Description
Wait for Userinit to finish	Instructs UniPrint to wait for Userinit Logon Application to finish before UniPrint LogScript is executed.
Set UniPrint as default printer	All users will have UniPrint set as their default printer in their sessions. Disable this option if UniPrint Client is not deployed.
Delete leftover print jobs	Deletes any leftover print jobs from disconnected sessions when the same user logs back on to this application server.
Run PrintPAL on this server	Launches the PrintPAL Client when a session is started and maps printers on behalf of the user.

4. Click **Save**.



Configuring UniPrint Adobe Plug-in

At times re-rendering a document that is already in PDF format may produce undesirable results. In such cases, users can utilize the UniPrint Adobe Plug-in tool to prevent the UniPrint printer driver from re-rendering the file.

The UniPrint Adobe Plug-in is installed when you install the UniPrint Application Server component and is compatible with Adobe Acrobat or Adobe Reader 5.0 or later.

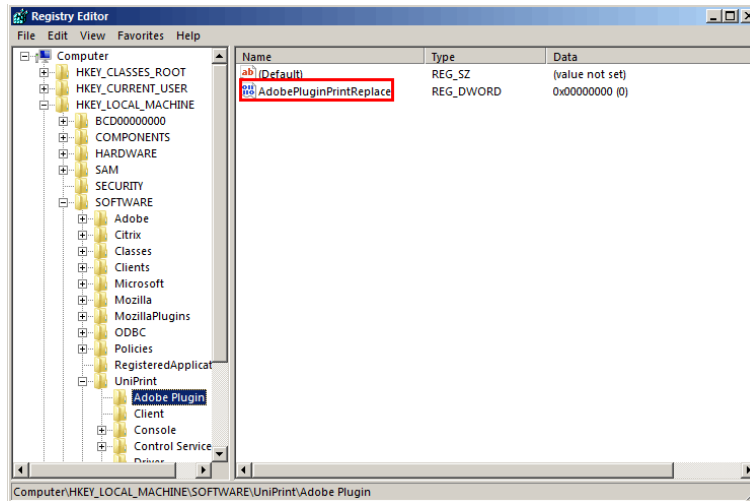
Replacing the Print function with Print to UniPrint

By default, a PDF document will be re-rendered by the UniPrint printer driver if users select **Print** instead of **Print to UniPrint** in the **File** menu. UniPrint provides a registry key that will change this functionality so that all printing through the Adobe Reader/Acrobat will be sent through the Adobe Plug-in.

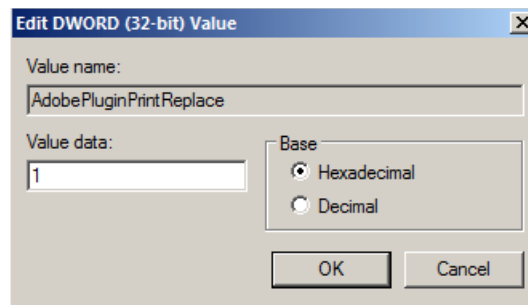
To prevent re-rendering of PDF documents, do the following:

1. On the UniPrint Application Server, click **Start** and then click **Run**.
2. Type `regedit` and then click **OK** to edit the registry.

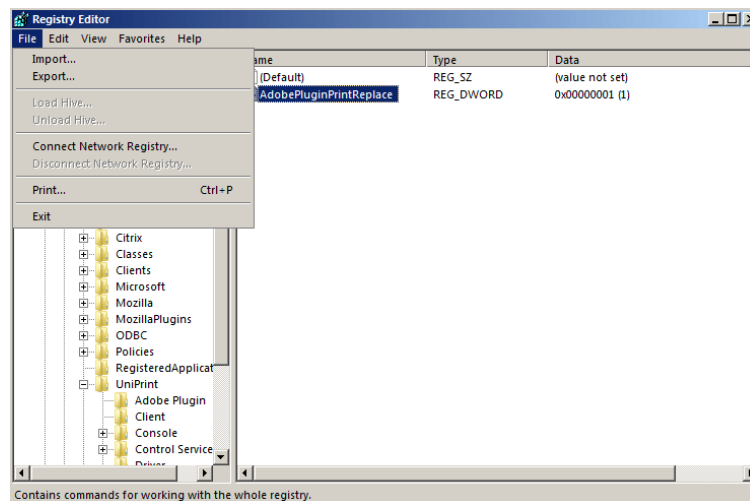
3. In the registry editor, expand the **HKEY_LOCAL_MACHINE\SOFTWARE\UniPrint\Adobe Plugin** key and double-click **AdobePluginPrintReplace**.



4. Under **Value data**, enter 1 and then click **OK**.



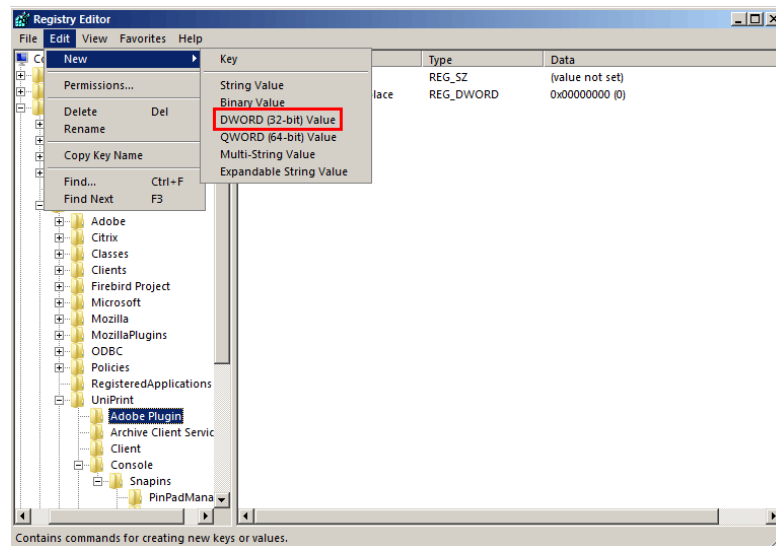
5. In the **File** menu, click **Exit**.



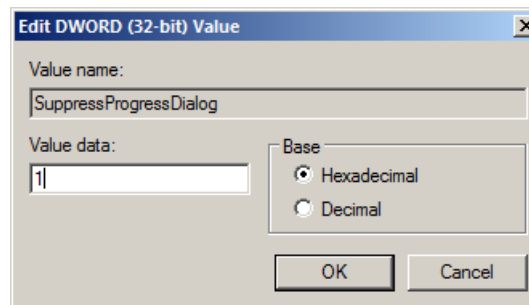
Suppressing the Adobe Plug-in Progress Message Box For Large Print Jobs

When printing large PDF files through the Adobe Plug-in, a progress message box will appear and prevent the user from printing any other PDF files. To prevent this the progress message box from appearing, do the following:

1. On the UniPrint Application Server, click **Start** and then click **Run**.
2. Type regedit and then click **OK** to edit the registry.
3. In the registry editor, expand the **HKEY_LOCAL_MACHINE\SOFTWARE\UniPrint\Adobe Plug-in** key.
4. In the **Edit** menu, click **New** and then select **DWORD (32-bit) value**.



5. Name this new value **SuppressProgressDialog** and then double-click **SuppressProgressDialog**.
6. To prevent the Adobe Plug-in message box from appearing, set this value to 1 and then click **OK**.



7. Close the Registry Editor.

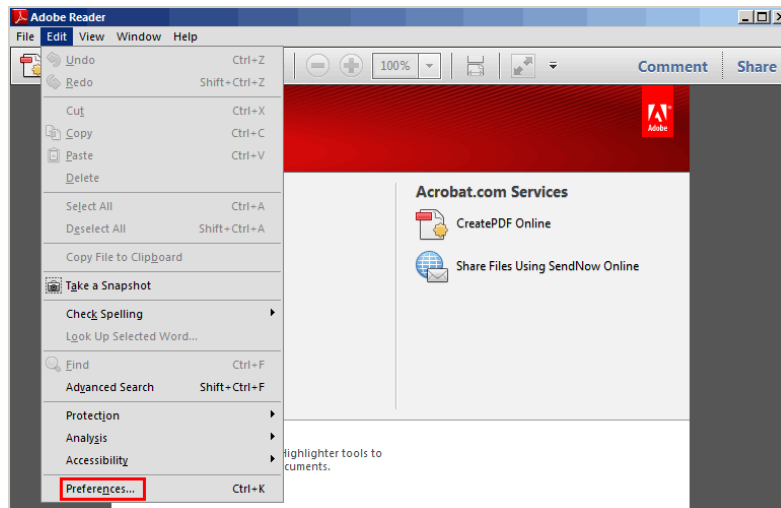
Disabling Protected Mode at Startup in Adobe Reader X & XI

With Adobe Reader X and XI, Protected Mode needs to be disabled at startup. This feature prevents printer settings from being read.

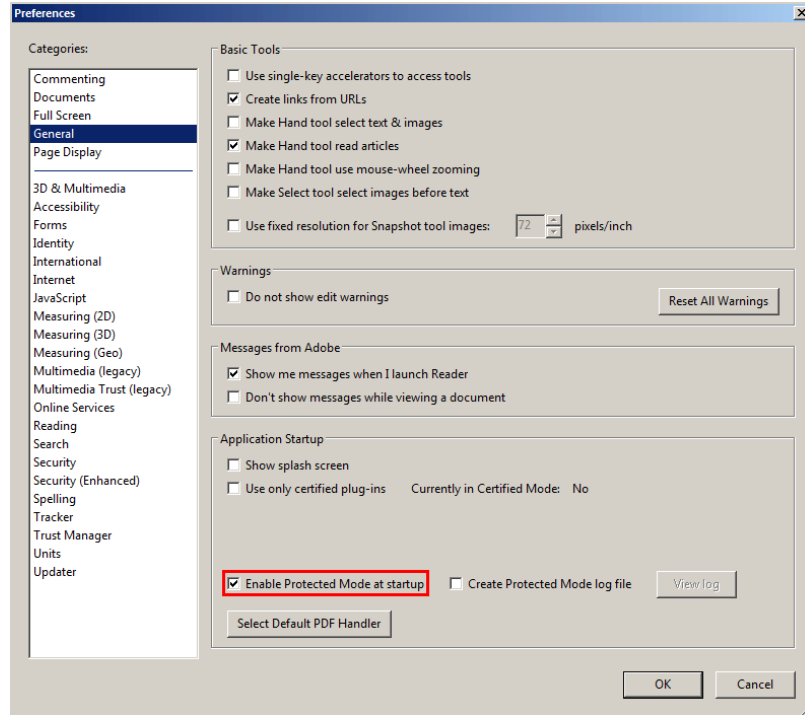
For Adobe Reader X

To disable Protected Mode in Adobe Reader X, do the following:

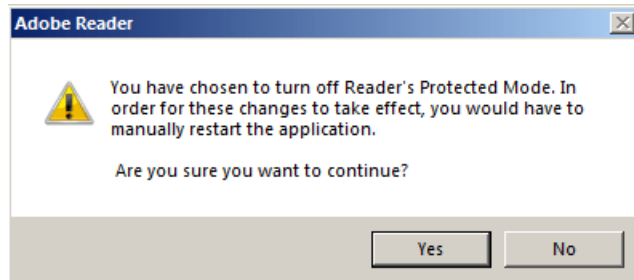
1. On the UniPrint Application Server, launch Adobe Reader X.
2. In the **Edit** menu, click **Preferences**.



- Under **Categories**, click **General** and then clear **Enable Protected Mode at startup**.



- Click **Yes**.



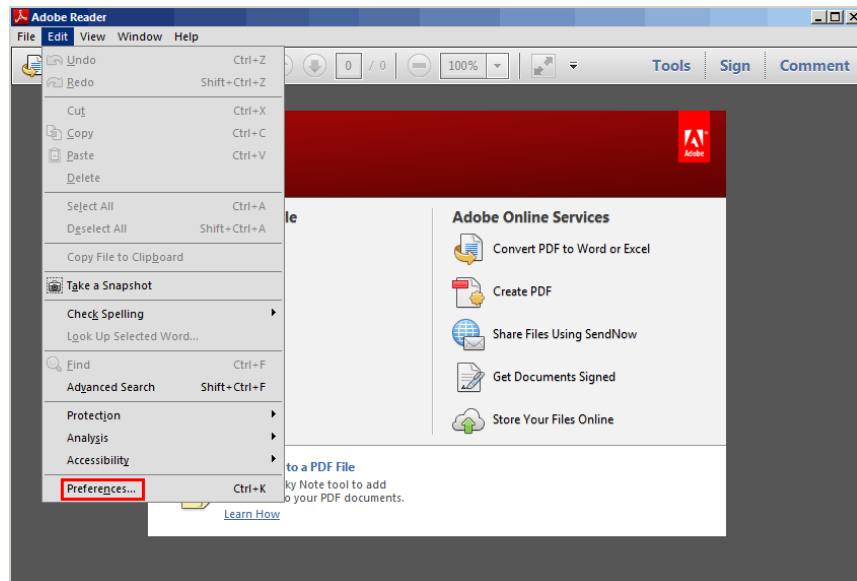
- Click **OK** and then restart Adobe Reader X manually.

For Adobe Reader XI

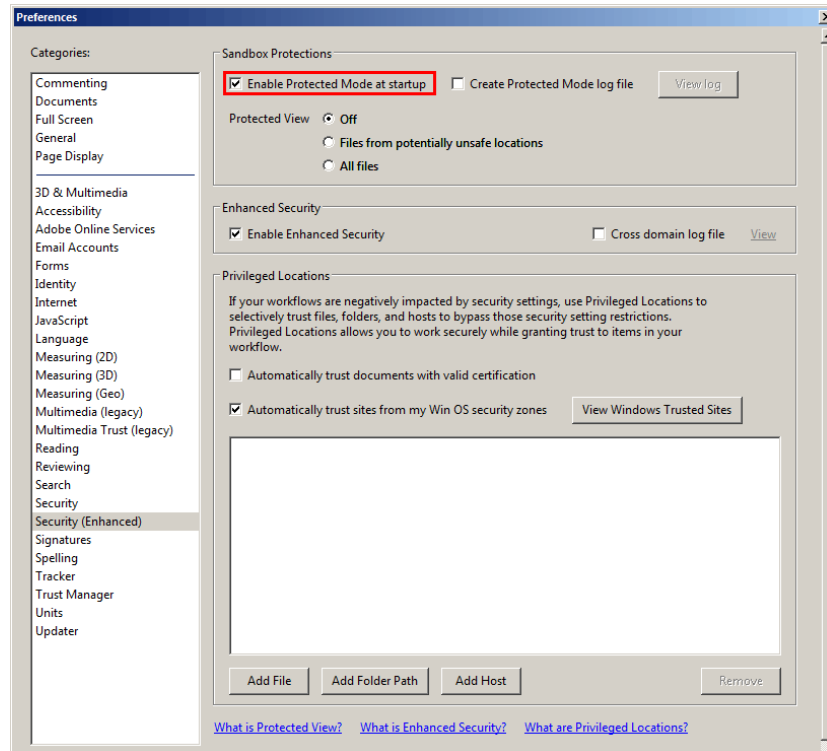
In Adobe Reader XI, the location of the Protected Mode option has changed. To disable Protected Mode in Adobe Reader XI, do the following:

- On the UniPrint Application Server, launch Adobe Reader XI.

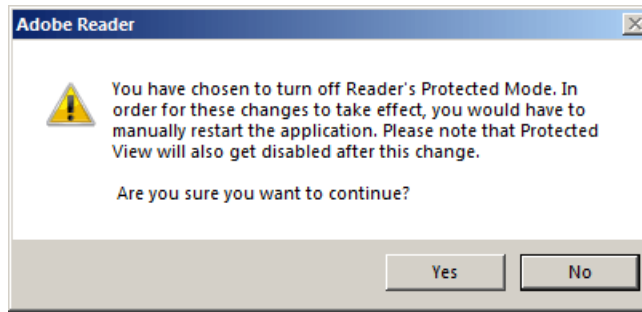
2. In the **Edit** menu, click **Preferences**.



3. Under **Categories**, click **Security (Enhanced)** and then clear **Enable Protected Mode at startup**.



- Click **Yes**.



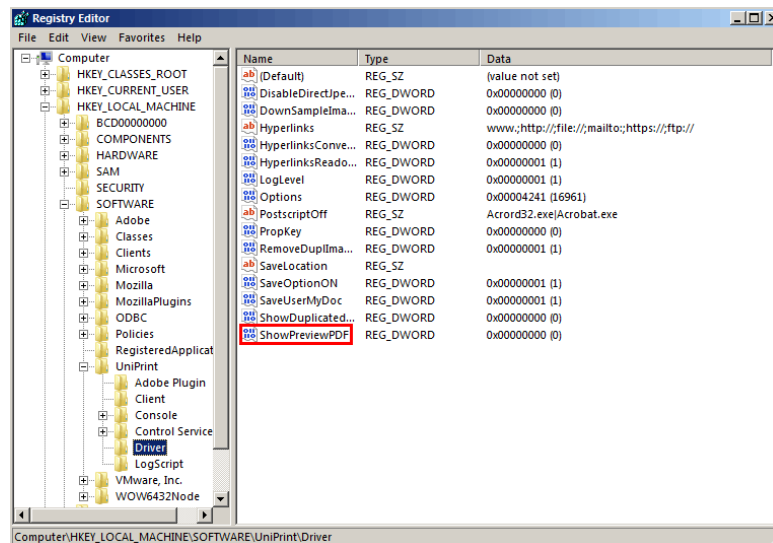
- Click **OK** and then restart Adobe Reader XI manually.

Previewing PDF Documents With Adobe Reader

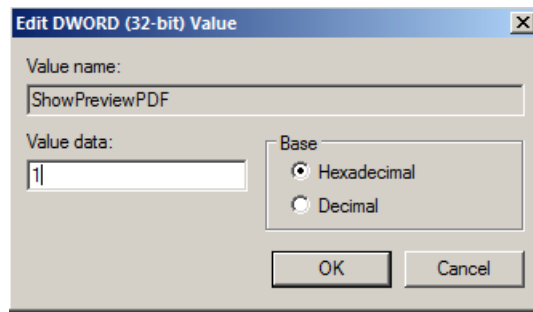
Some applications do not allow the user to preview their document prior to printing. Thin-client and VDI users who don't have access to the UniPrint Client, can still preview their documents with Adobe Reader.

To enable print preview through Adobe Reader on a job-by-job basis, do the following:

- On the UniPrint Application Server, click **Start** and then click **Run**.
- Type `regedit` and then click **OK** to edit the registry.
- In the Registry Editor, expand **HKEY_LOCAL_MACHINE\SOFTWARE\UniPrint\Driver** and double-click **ShowPreviewPDF**.



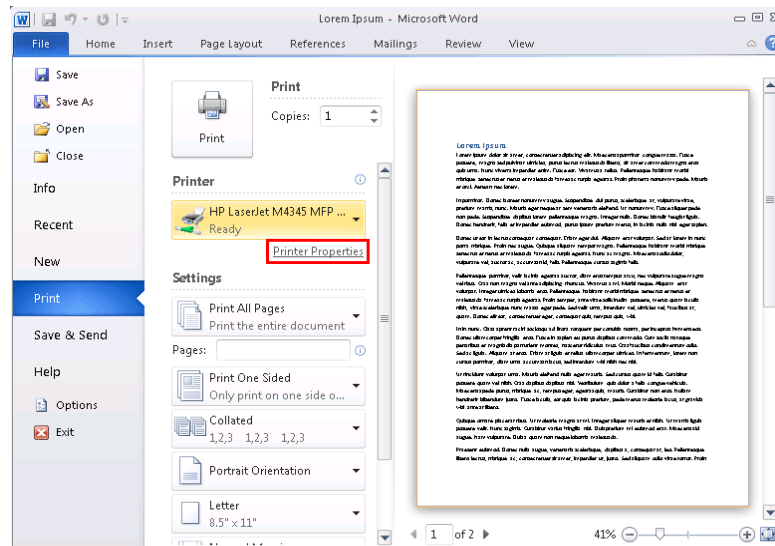
- Under **Value data**, enter 1 and then click **OK**.



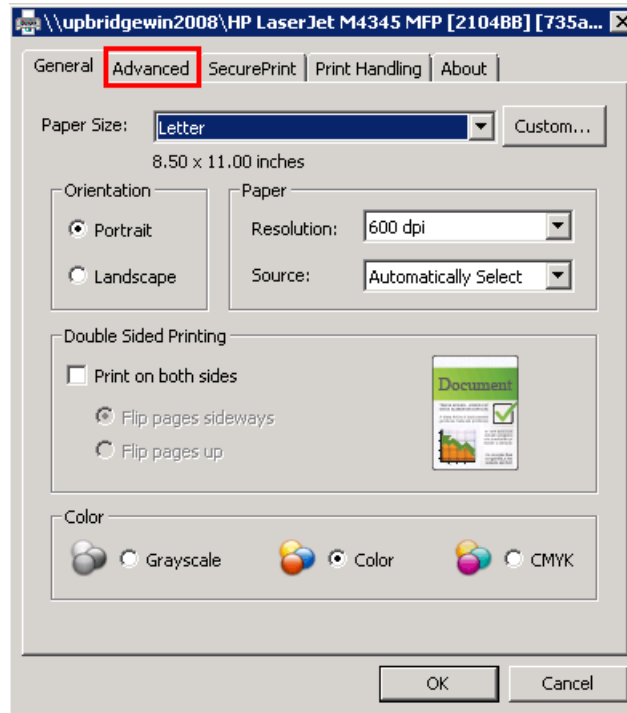
- In the **File** menu, select **Exit**.

Using Adobe Reader to Preview PDF Print Jobs

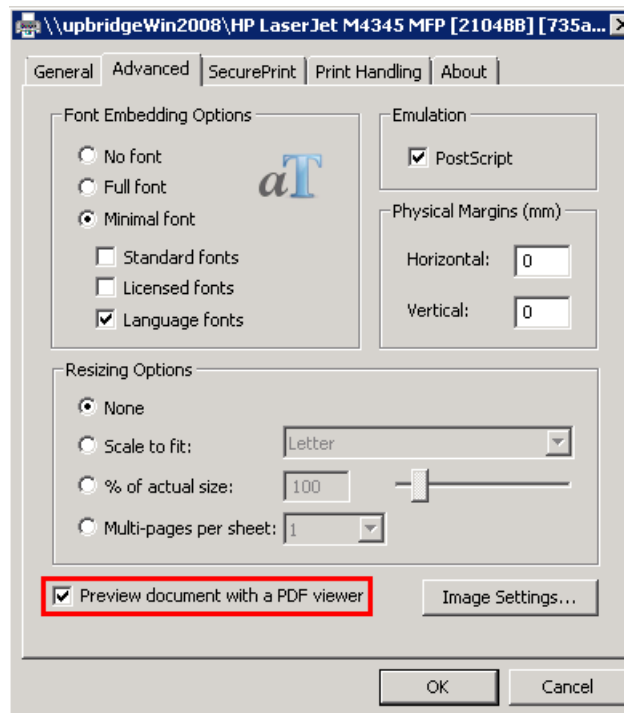
- Start a session by logging onto your application server and then open an application, for example Microsoft Word.
- Print from the application and select either UniPrint or any Gateway printer.
- Click **Printer Properties**.

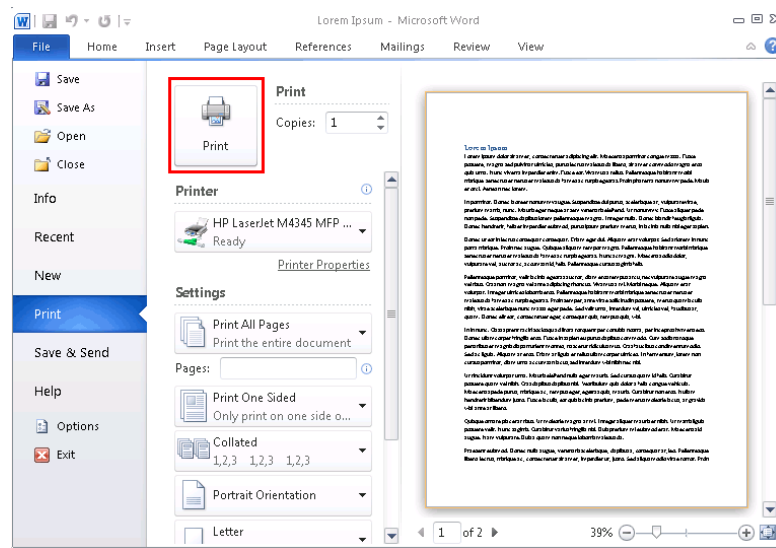
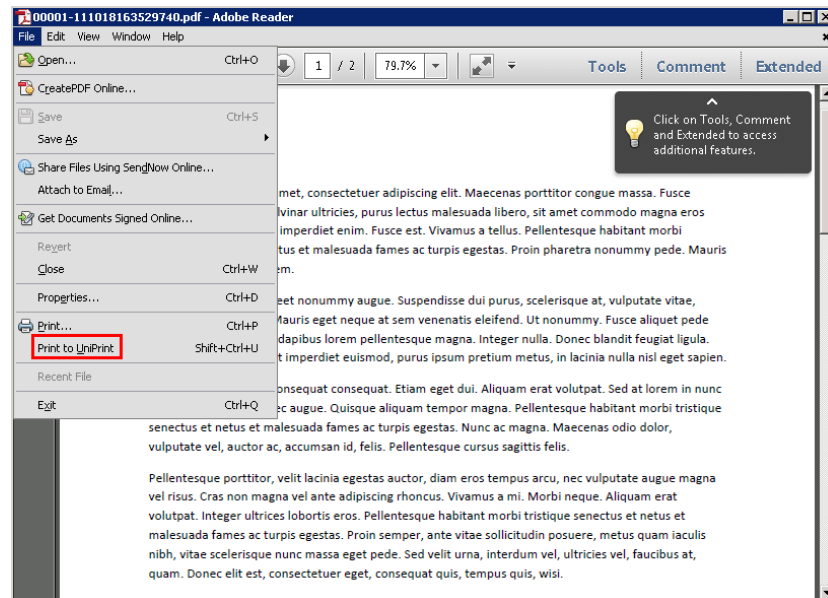


4. Click the **Advanced** tab.



5. Select **Preview document with a PDF viewer** and then click **OK**.



6. Click **Print**.7. To print from Adobe Reader, in the **File** menu, click **Print to UniPrint**.

NOTE: In the event of an update of Adobe Reader or Acrobat, the UniPrint Adobe Plug-in (UPPlugin.api) should be copied to \\Program Files\\Adobe\\...\\Reader\\plug-ins.

Most configuration can be done through the UniPrint Management Console, however, UniPrint has provided administrative templates to standardize configuration for a larger number of users.

An ADM, ADMX and ADML (Administrative Template) files are available in the UniPrint Infinity installation package in the Admin folder. Using an administrative template file, network administrators can configure default UniPrint settings in a structured manner for all users.

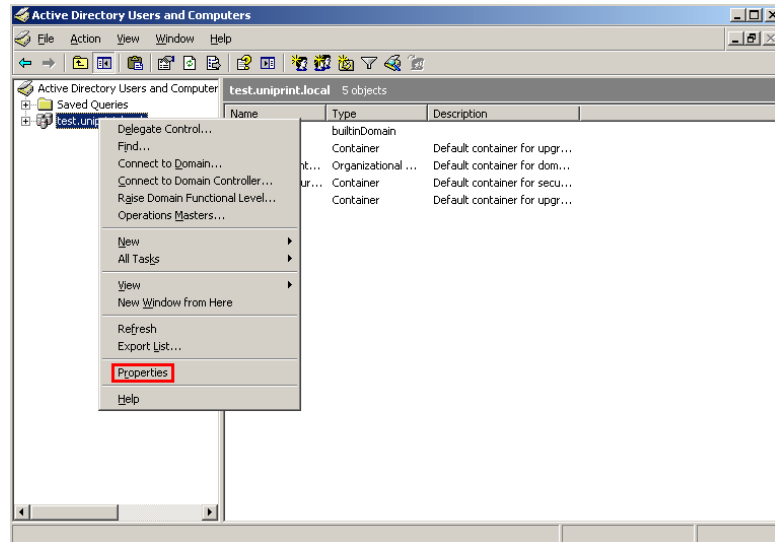
Loading a Classic Administrative Template

The following instructions are based on Windows Server 2003. For other versions of Windows, refer to your Microsoft documentation. Before proceeding, copy UniPrint8_Services.adm to a distribution point that is accessible by the domain controller.

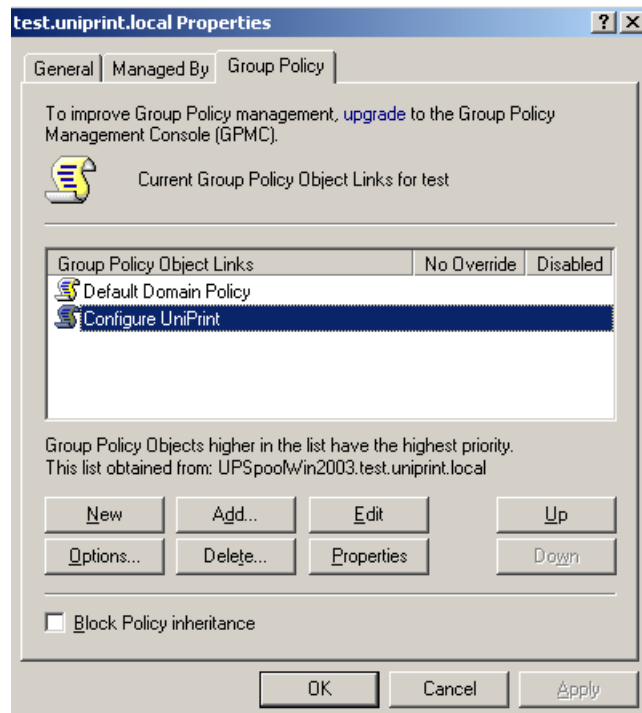
To load the classic administrative template, **UniPrint8_Services.adm**, into Group Policy Object Editor:

1. From your domain controller, click **Start**, point to **Programs**, **Administrative Tools** and then click **Active Directory Users and Computers**.

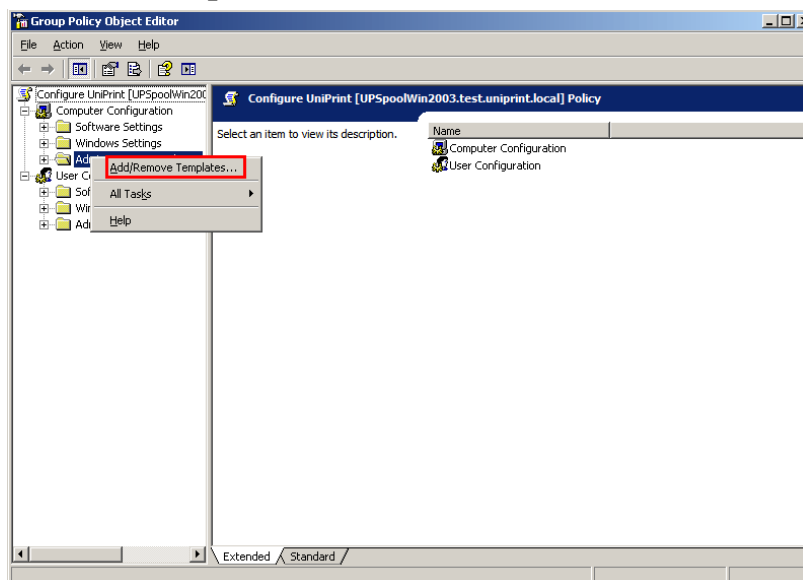
2. Right-click the domain that you want **UniPrint8_Services.adm** to be applied to and select **Properties**.



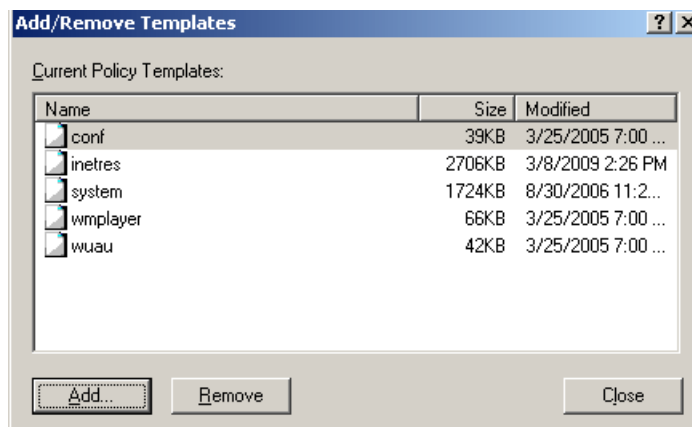
3. Click the **Group Policy** tab.
4. Select the Group Policy setting you want to edit and then click **Edit** to open the **Group Policy Object Editor**.



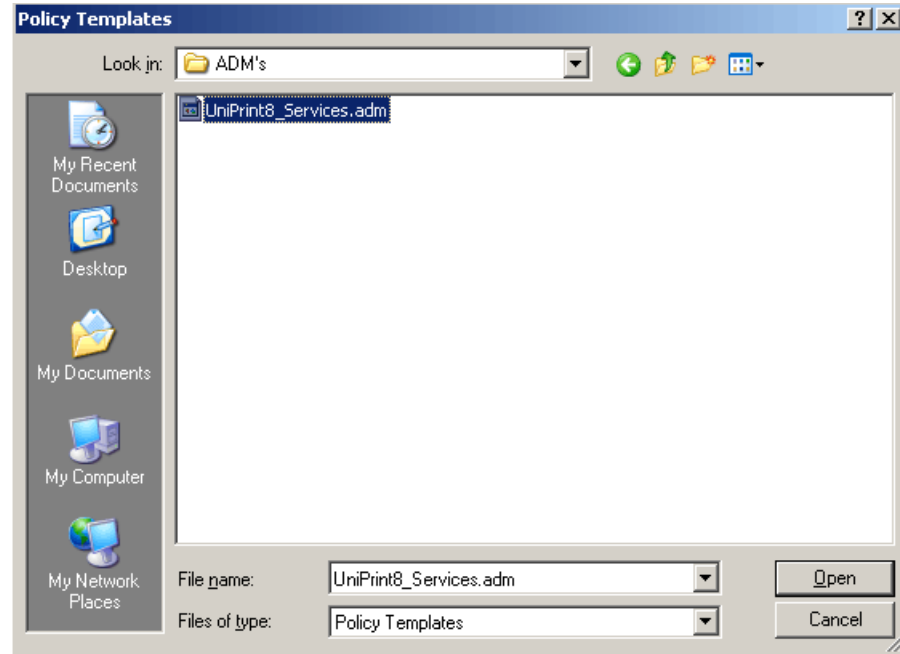
5. Under either **Computer Configuration** or **User Configuration**, right-click **Administrative Templates** and then select **Add/Remove Templates**.



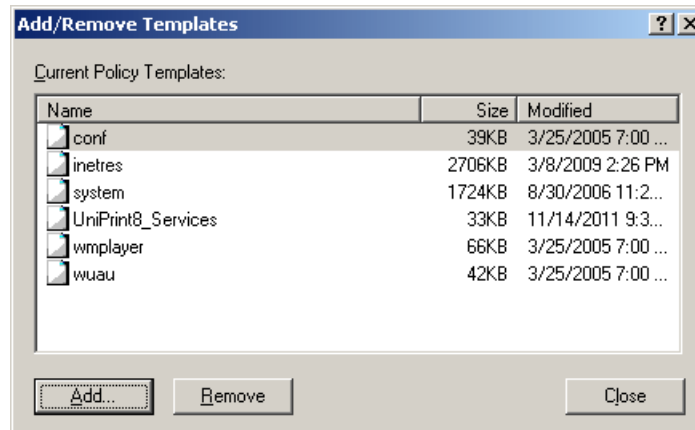
6. Click **Add**.



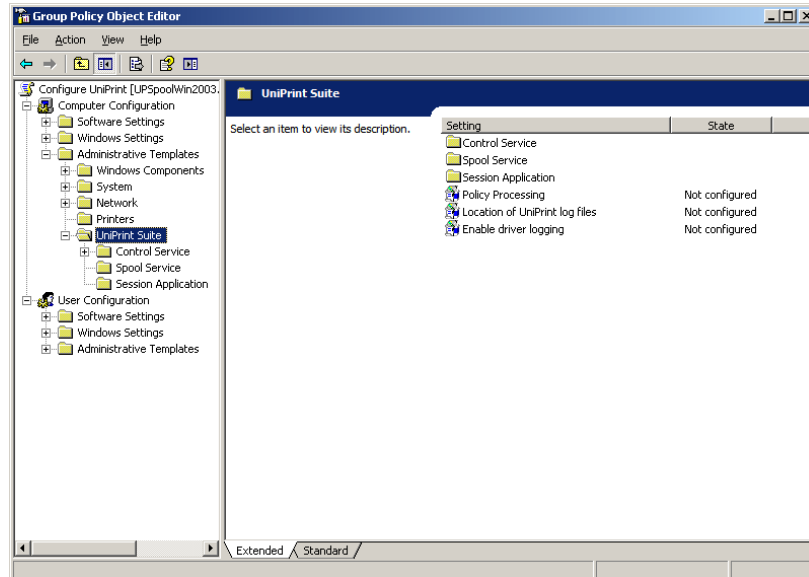
7. Browse to the location where **UniPrint8_Services.adm** is stored and then click **Open** to add the new template.



8. Click **Close**.

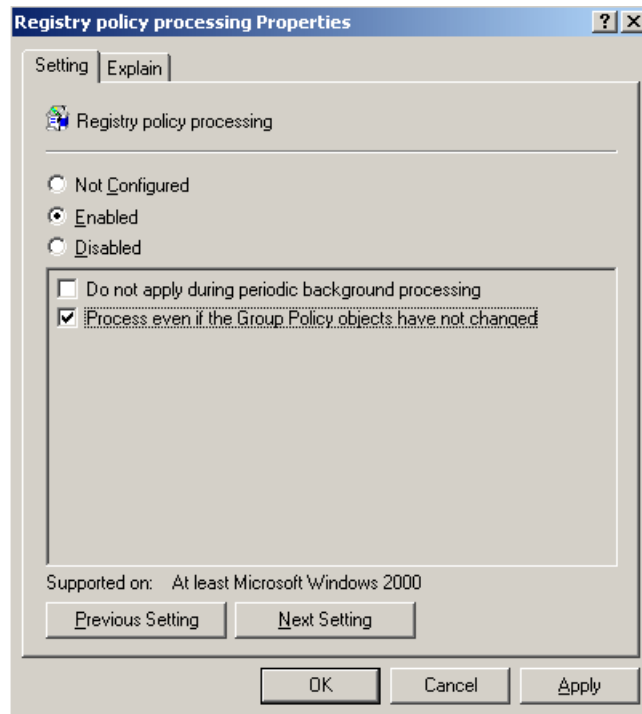


9. Settings are divided into several categories and by default are **Not configured**.



10. To edit any of these settings, double-click the setting and select **Enabled**. For more information on each setting, click the **Explain** tab.
11. To ensure that the ADM settings are set on the domain controller, expand **Computer Configuration**, **Administrative Templates**, **System**, and **Group Policy**.

12. Double-click on **Registry policy processing** and select **Enabled**. Select **Process even if Group Policy objects have not changed** and then click **OK**.



13. Close the Group Policy Object Editor and click **OK** to return to Active Directory Users and Computers.

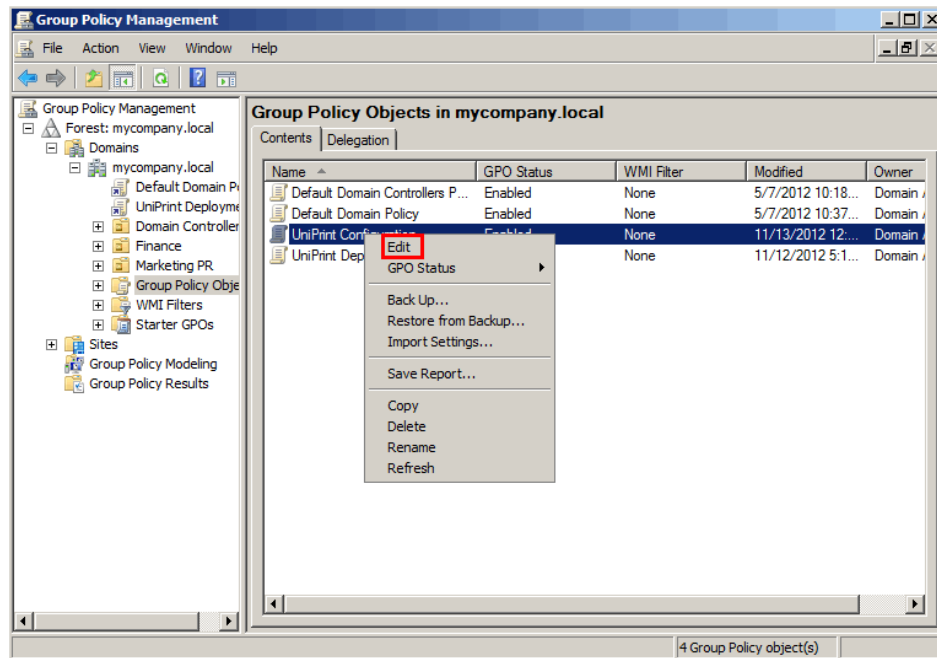
Loading and Configuring an Administrative Template in Windows Vista or later

Windows Vista, Windows 7 and Windows Server 2008 support XML-based ADM files, ADMX and ADML. ADML are XML-based ADM files that contain language-specific settings. Unlike, ADM files, ADMX files are not stored in individual Group Policy Objects and do not need to be “loaded”, only copied to the appropriate folders.

The following instructions are based on Windows Server 2008. For other versions of Windows, refer to your Microsoft documentation.

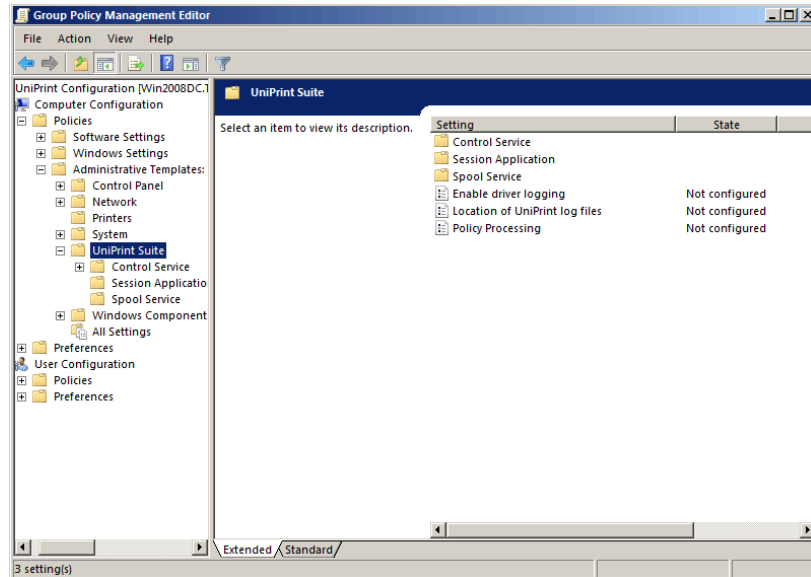
1. Copy **UniPrint8_Services.admx** from the UniPrint installation package Templates folder to the domain controller, %systemroot%\PolicyDefinitions.

2. Copy **UniPrint8_Services.adml** from the UniPrint installation package Templates folder to the domain controller, %systemroot%\PolicyDefinitions\en-US.
3. From your domain controller, click **Start**, point to **Programs**, **Administrative Tools** and then click **Group Policy Management**.
4. Expand your domain and then click **Group Policy Objects**.
5. Right-click the Group Policy Object that you want to edit and then click **Edit** to open the **Group Policy Object Editor**.



NOTE: In Windows Server 2008 or later, the **Group Policy Management** feature must be enabled first.

6. Expand either **Computer Configuration** or **User Configuration, Administrative Templates**, and then click **UniPrint Suite**.



7. Settings are divided into several categories and by default are **Not Configured**. To modify a setting, double-click the setting and select **Enabled**. For more information on the setting, click the **Explain** tab.

Configuring PrintPAL

PrintPAL is a proximity-based printing utility that can be used to eliminate the need to create and compile Windows scripts. When a user logs onto a session, PrintPAL will automatically map selected printers to their session.

Configuring PrintPAL involves four major steps:

1. Planning out a PrintPAL map
2. Creating a PrintPAL map
3. Testing the PrintPAL map
4. Configuring the PrintPAL Client

The majority of the configuration time involves creating a PrintPAL map, so we recommend first planning out your device-to-printer map, otherwise known as PrintPAL map.

Planning Your PrintPAL Mapping

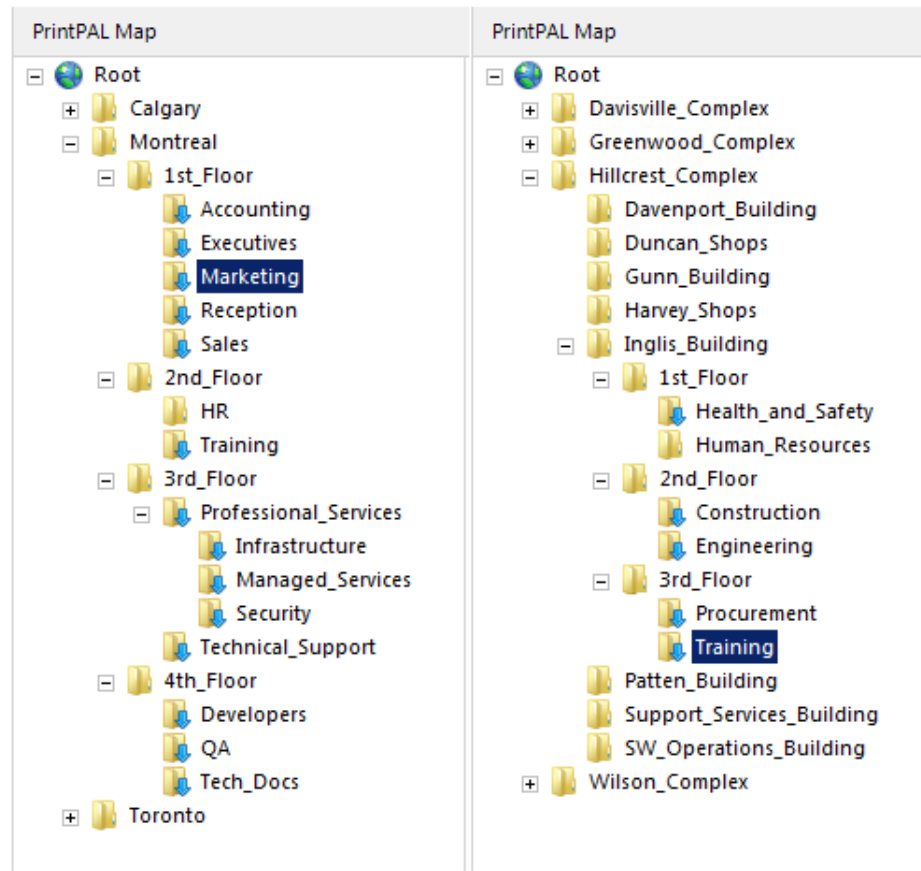
Planning your PrintPAL mapping can save you hours of troubleshooting. You can plan for the majority of your PrintPAL map by examining your network topology, client devices on your network and how you want to group the client devices with UniPrint Gateway printers on your network.

Grouping clients devices may depend on your organizational structure, corporate security policies and network environment. Other parameters to consider are the following:

- Geographic location (country, province/state, city)
- Complex or campus
- Building name
- Floor or level
- Department
- Job function or job title

As the network administrator, you will also have to determine which groups of client devices will initially have access to a set of Gateway printers. This can be based on the proximity to a printer or it can be based on corporate security policies or a combination of both.

The following are two examples of how to group client devices.

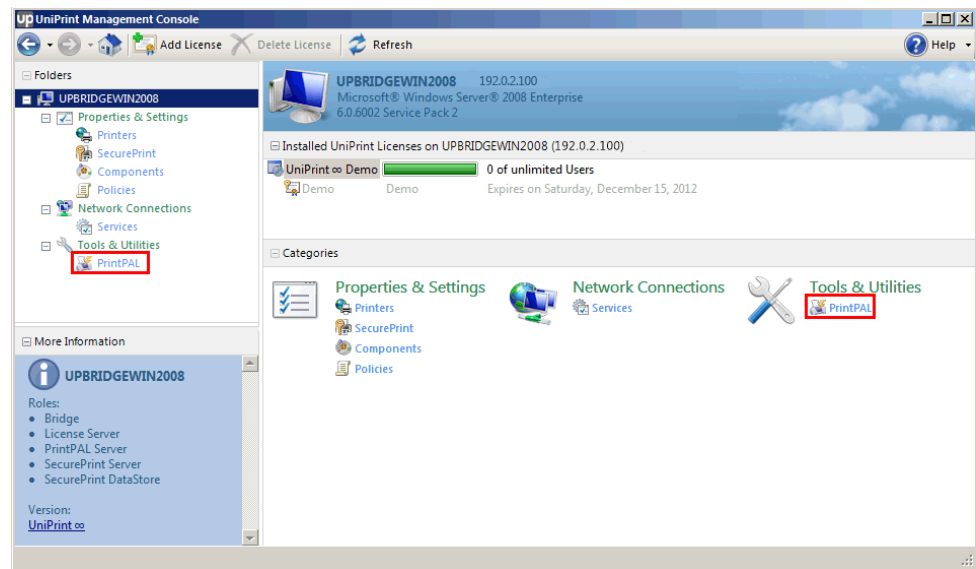


Setting Initial PrintPAL Configuration Settings

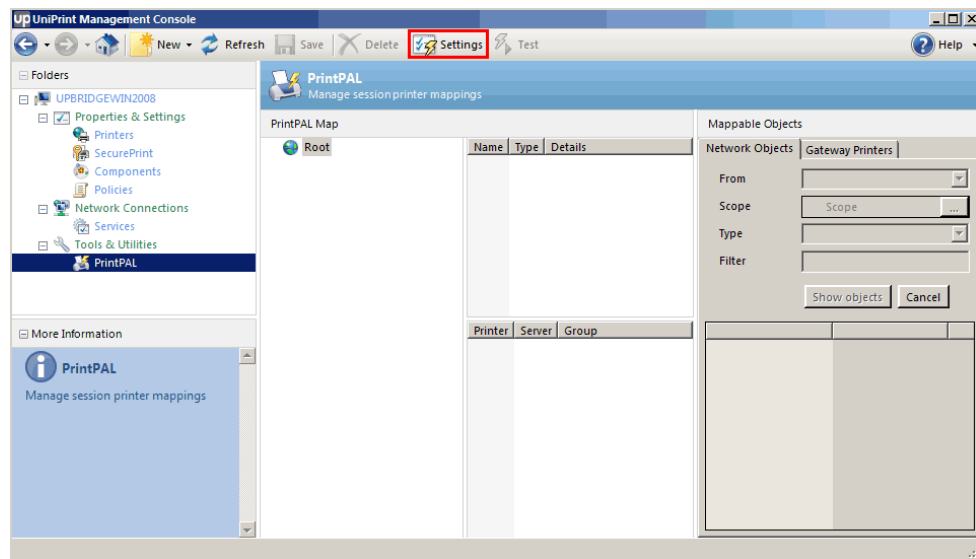
The initial PrintPAL setup must be done from the UniPrint Bridge. Managing PrintPAL can be done from any application server however, PrintPAL performs best when managed from the UniPrint Bridge.

1. On the UniPrint Bridge, click **Start**, click **All Programs**, click **UniPrint Suite** and then click **UniPrint Management Console**.

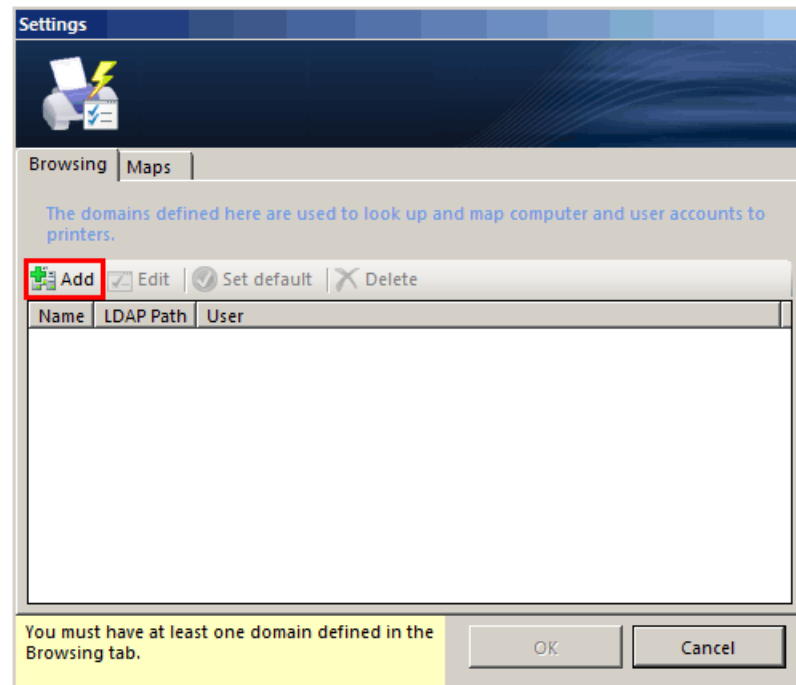
2. Under **Tools & Utilities**, click **PrintPAL**.



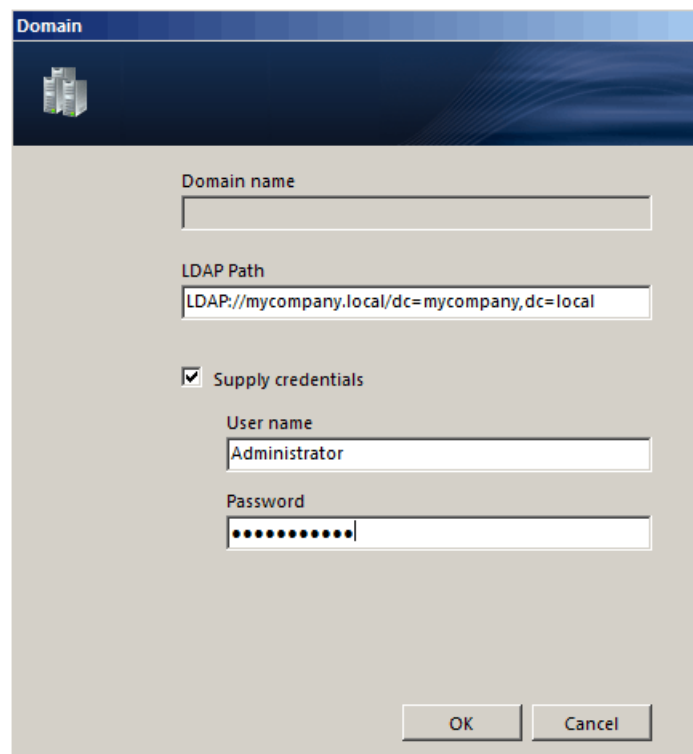
3. Click **Settings**.



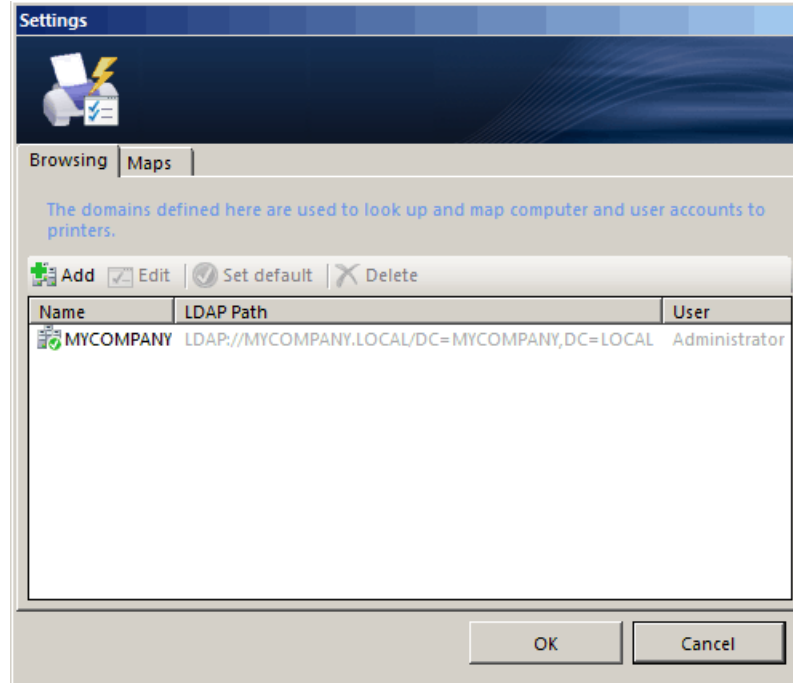
4. In the **Browsing** tab, click **Add**.



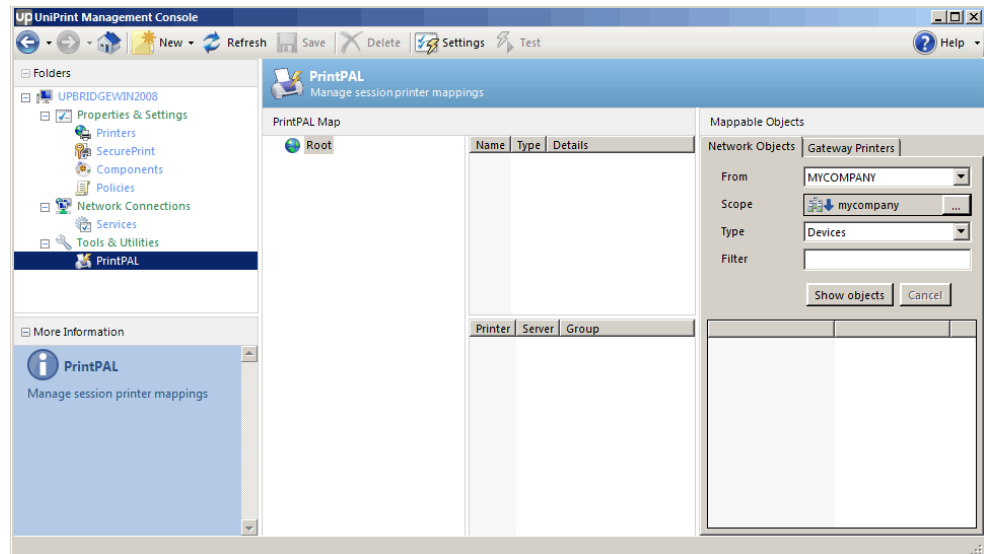
5. In the **Domain** dialog box, under **LDAP path**, enter the URL of your LDAP server.



- a) If your LDAP server requires authentication, select **Supply credentials** and then type in a **User name** and **Password**. Click **OK**.
6. PrintPAL will connect to your LDAP server. Click **OK**.



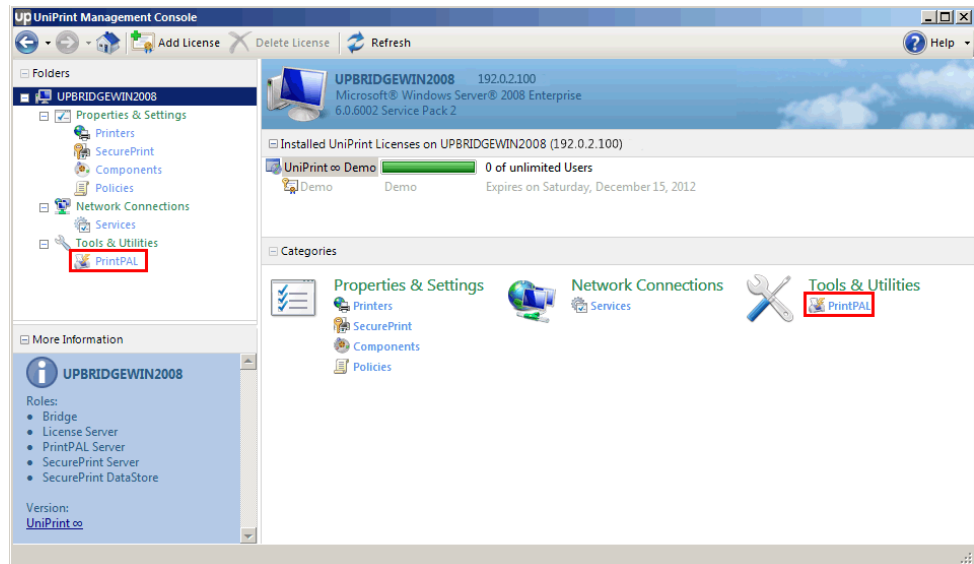
7. The domain will appear on the right side below **Mappable Objects**.



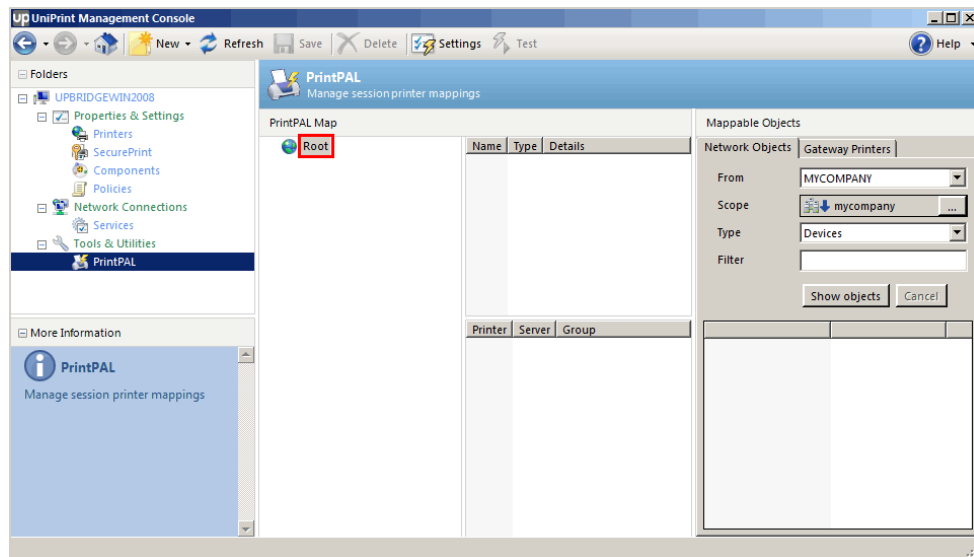
Creating Groups for the PrintPAL Map

1. On the UniPrint Bridge, open the **UniPrint Management Console**.

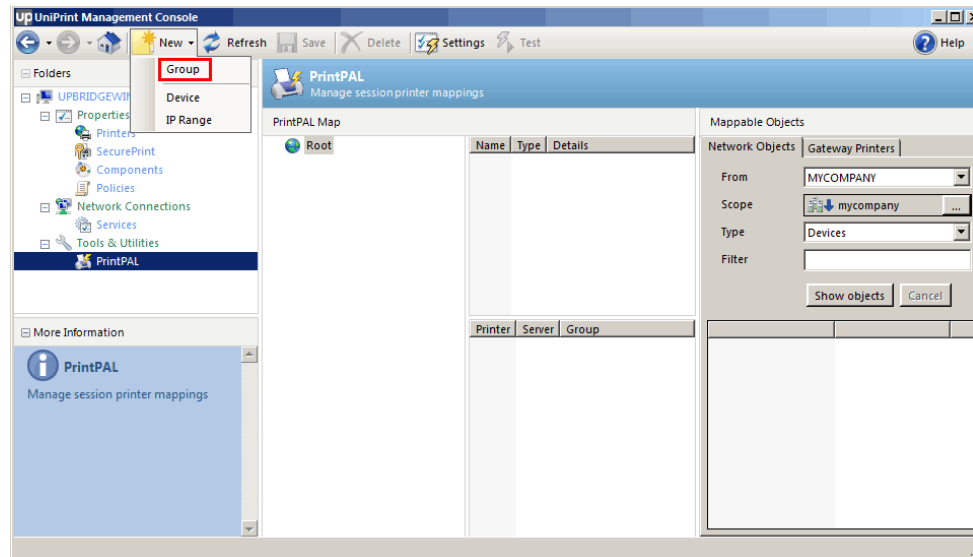
2. Under **Tools & Utilities**, click **PrintPAL**.



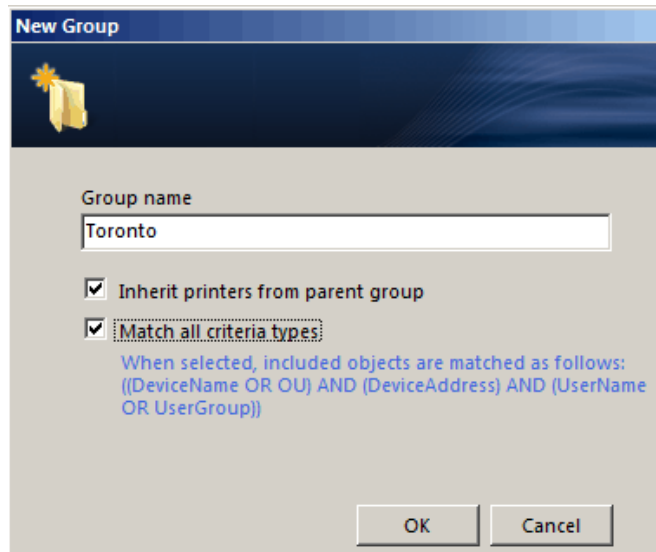
3. Under **PrintPAL Map**, select a parent group. If you are starting with a blank pane, click to select **Root**.



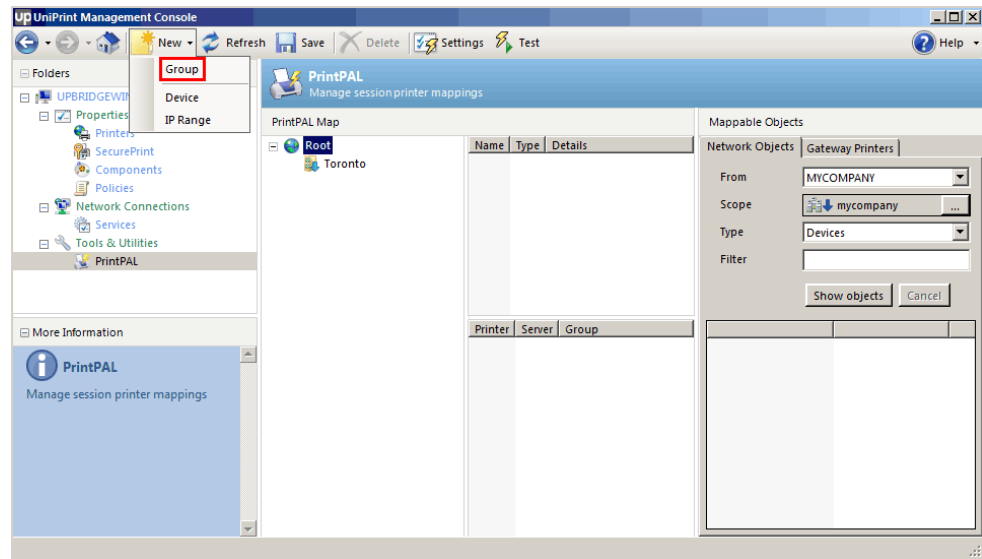
4. Click **New** and then click **Group**.



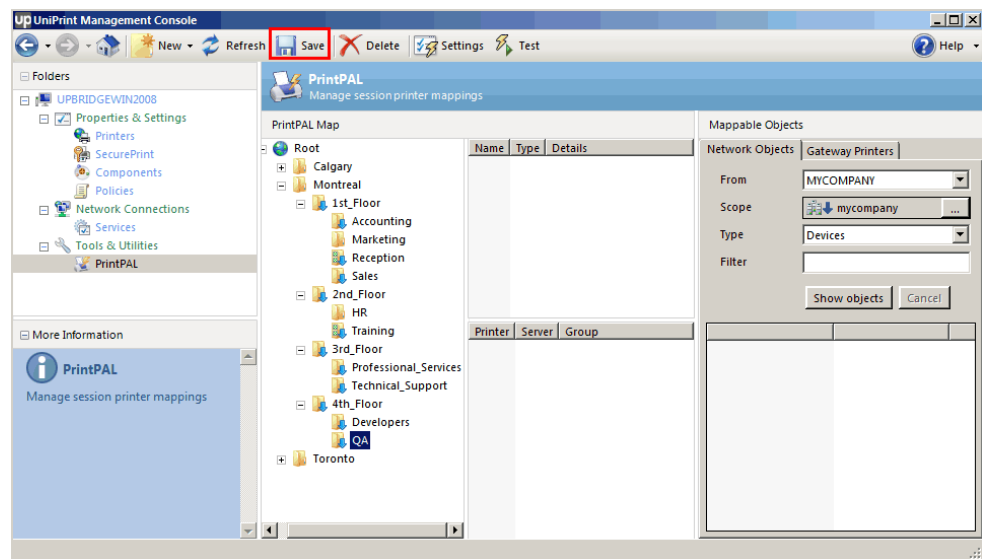
5. In the **New Group** dialog box, enter the group name and then select the **Inherit printers from parent group**, for this group to inherit devices and printers from the parent group. Select **Match all criteria types**, for this group to map printers to a session, if all criteria set in the group matches. For example, if an IP range and a user group are defined in the group, then the device must belong to both the IP range and the user must belong to the user group before printers are mapped to the session. Click **OK**. *Note: spaces and other special characters are not accepted, except the underscore (_).*






6. Repeat steps 5 to 7 to create additional groups.



7. Click **Save** to save your PrintPAL map.

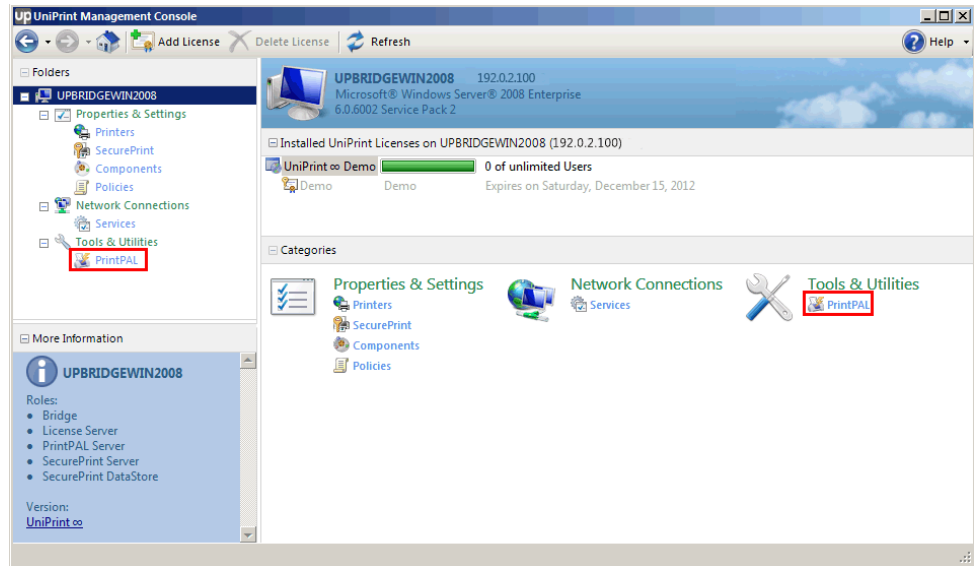


NOTE:  indicates that the group has inherited objects and printers from the parent group.  indicates that the group does not inherit objects and printers from the parent group.  indicates that all criteria defined in the group must match before printers are mapped to a session.

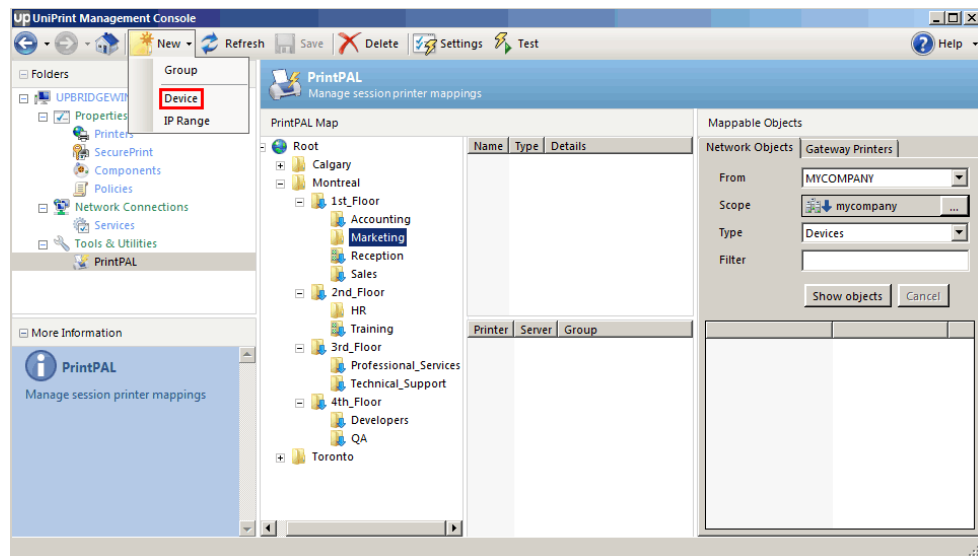
Adding A Device to the PrintPAL Map

This feature is good for adding devices that do not necessarily belong to a domain. For example, devices that belong to a workgroup.

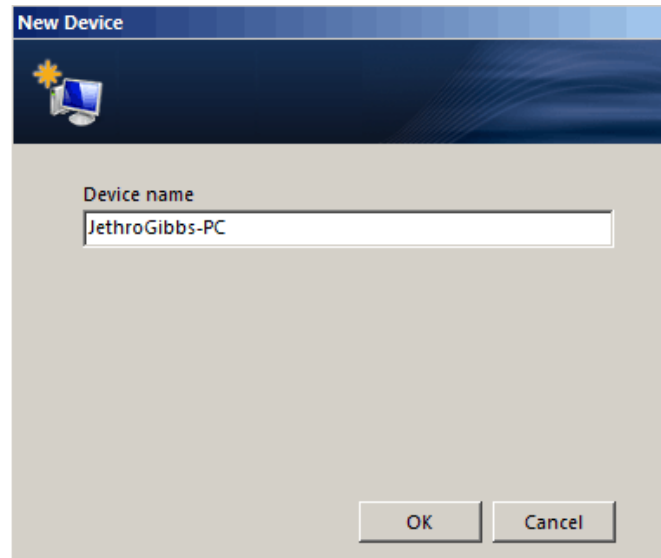
1. On the UniPrint Bridge, open the **UniPrint Management Console**.
2. Under **Tools & Utilities**, click **PrintPAL**.



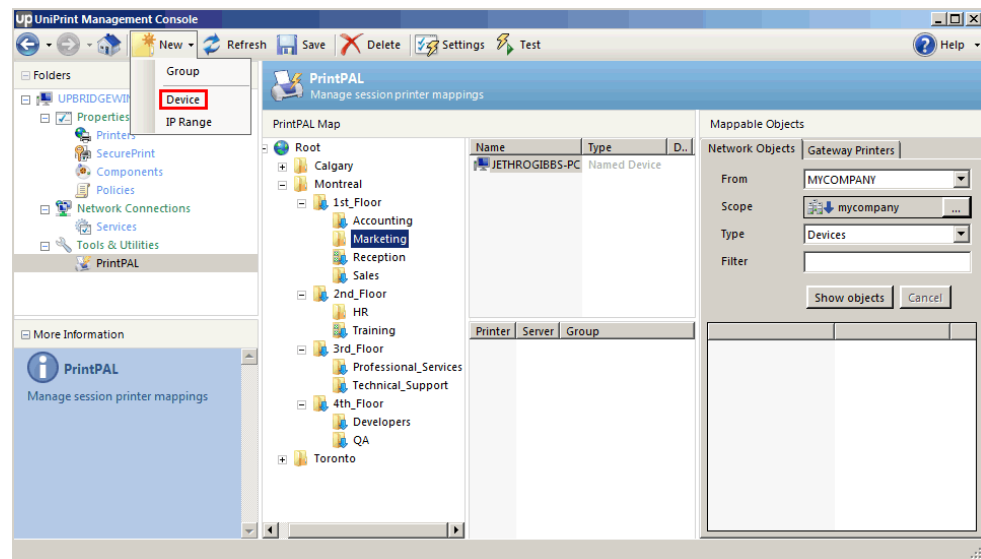
3. Under PrintPAL Map, click to select a group, click **New** and then click **Device**.



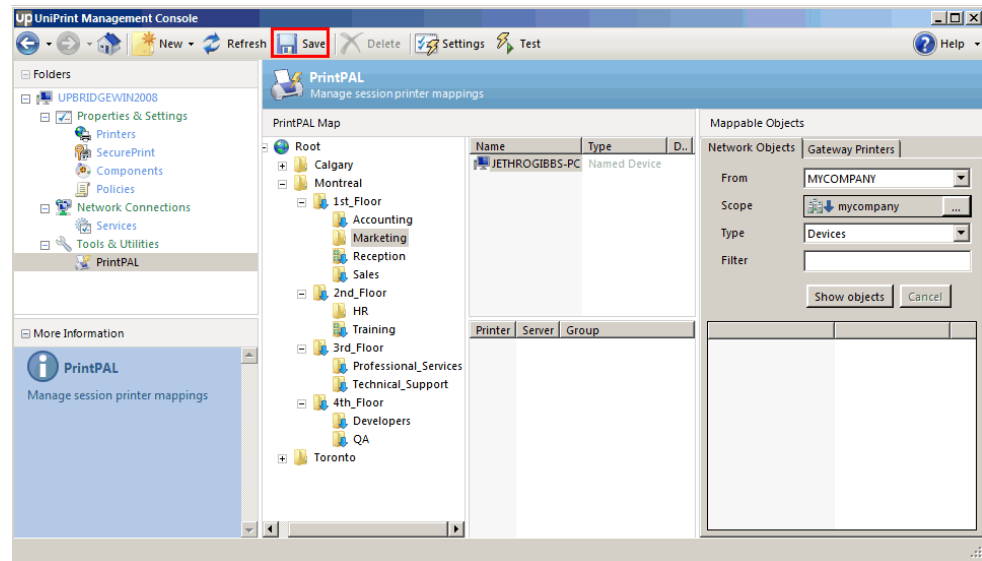
4. In the **New Device** dialog box, type the name of the device and then click **OK**.



5. Repeat steps 5 to 7 to add additional devices.



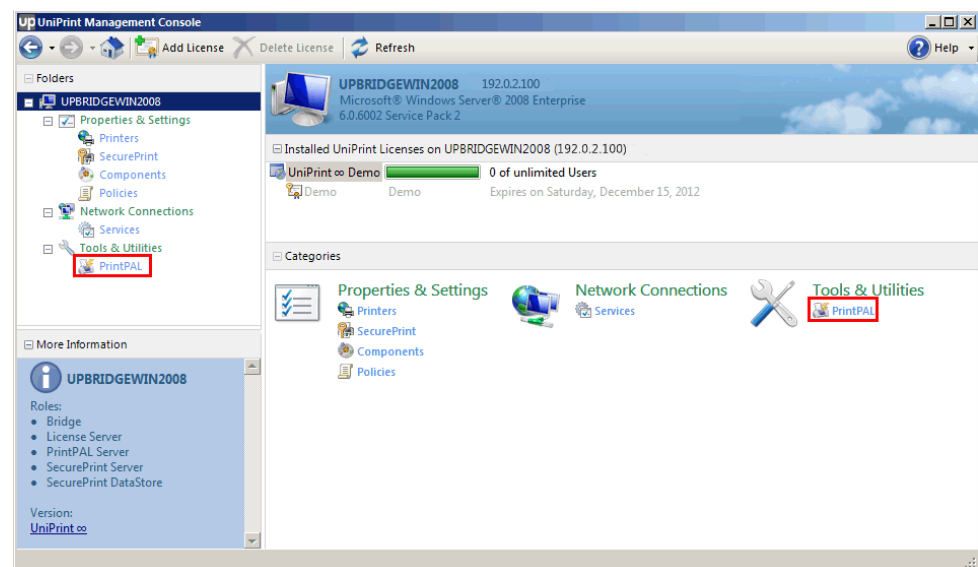
6. Click **Save** to save your PrintPAL map.



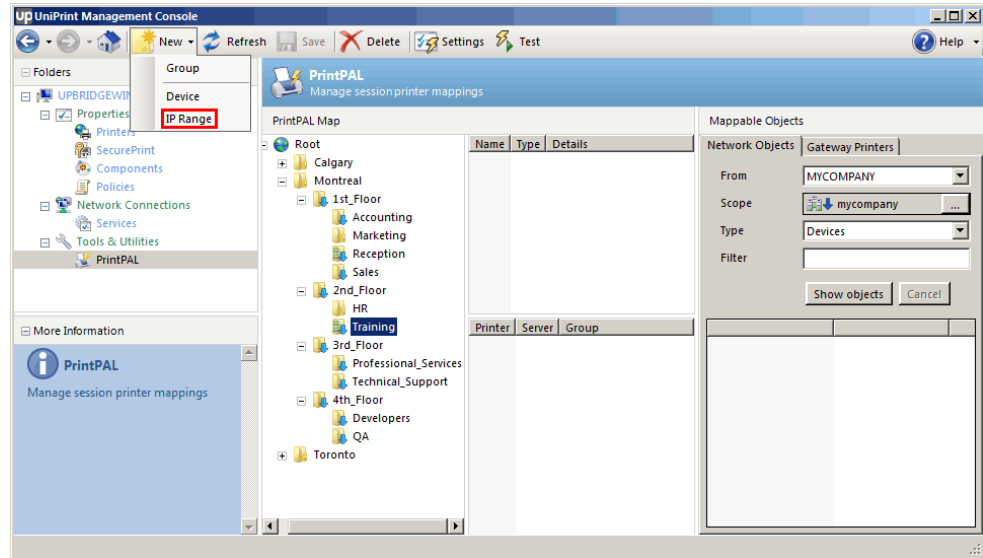
Adding an IP Range of Objects to the PrintPAL Map

This feature is good for a group of objects that utilize static IP addresses. This feature saves time since the network administrator does not need to go through the list of **Network Objects** individually under **Mappable Objects**, which can be a lengthy process for large environments.

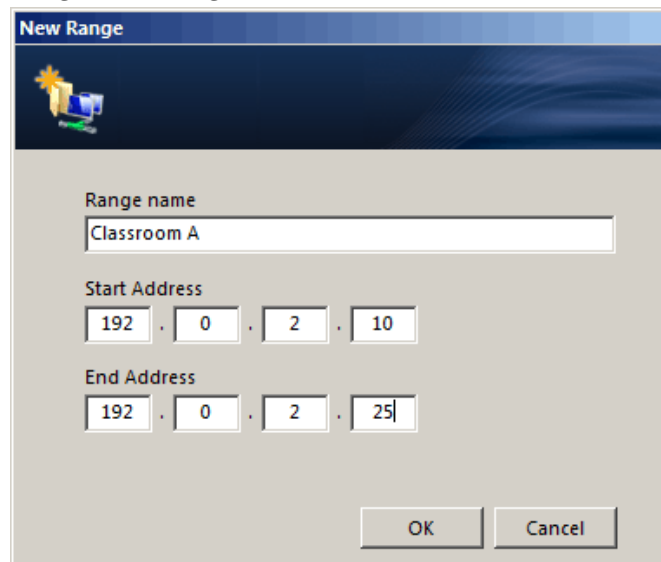
1. On the UniPrint Bridge, open the **UniPrint Management Console**.
2. Under **Tools & Utilities**, click **PrintPAL**.



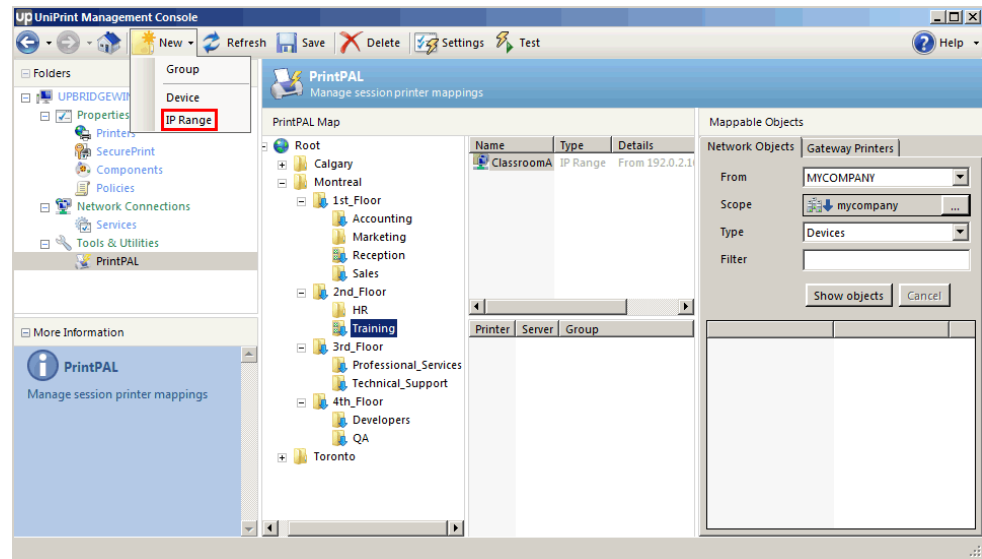
- Under **PrintPAL Map**, click to select a group, click **New** and then click **IP Range**.



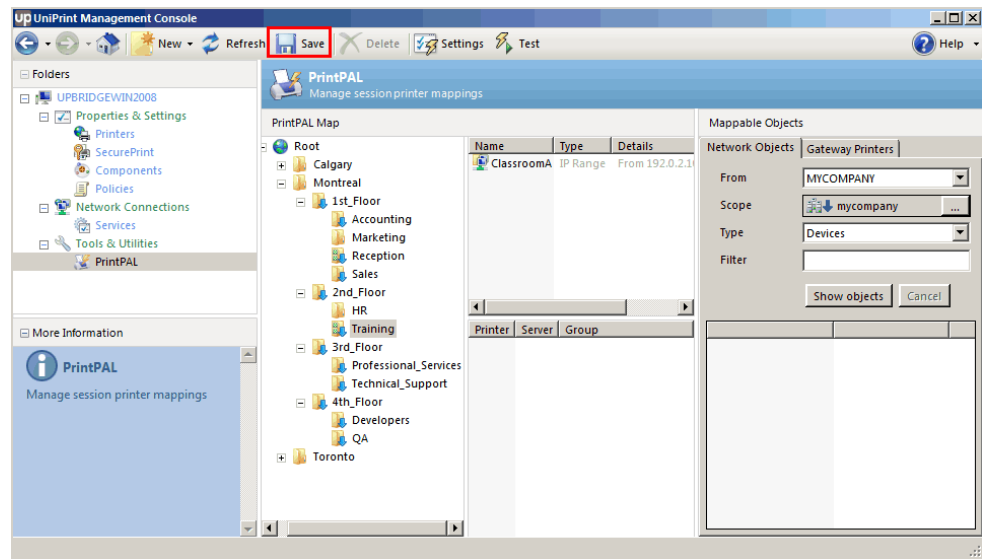
- In the **New Range** dialog box, enter the **Range name** and the beginning and ending IP addresses. Click **OK**.



5. Repeat steps 5 to 7 to add additional IP ranges.



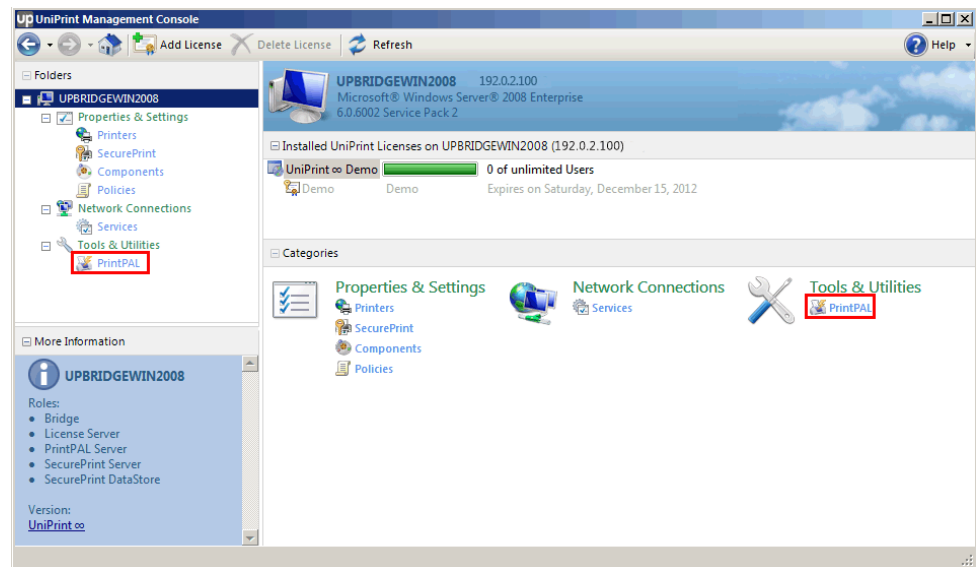
6. Click **Save** to save your PrintPAL map.



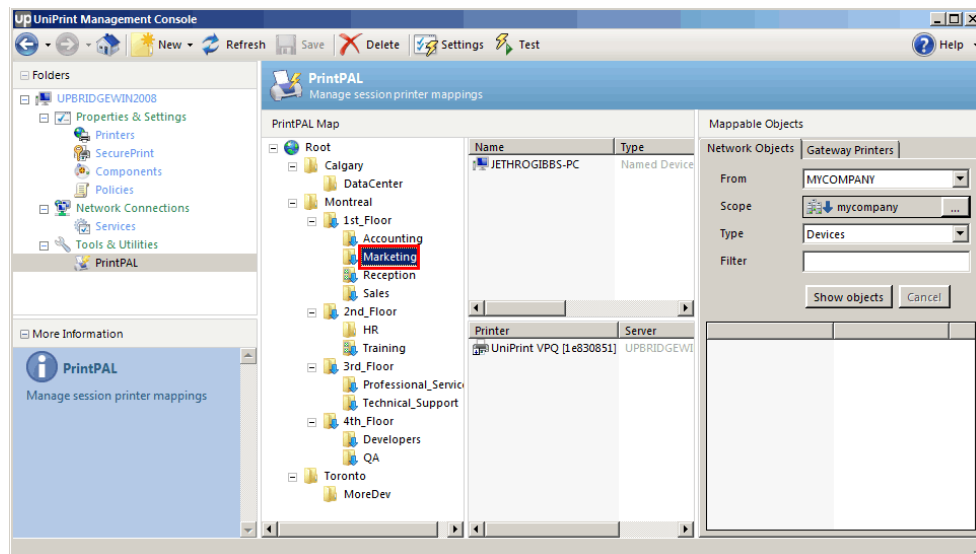
Mapping Network Objects to a Group in PrintPAL

1. On the UniPrint Bridge, open the **UniPrint Management Console**.


2. Under **Tools & Utilities**, click **PrintPAL**.

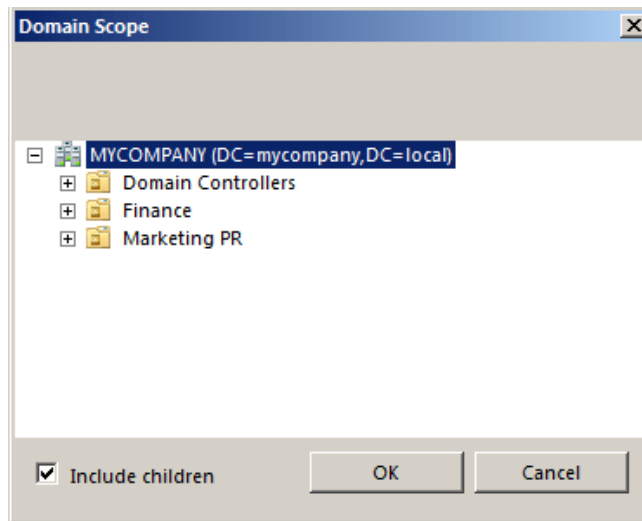


3. Under **PrintPAL Map**, click to select the group to which you want to map objects.

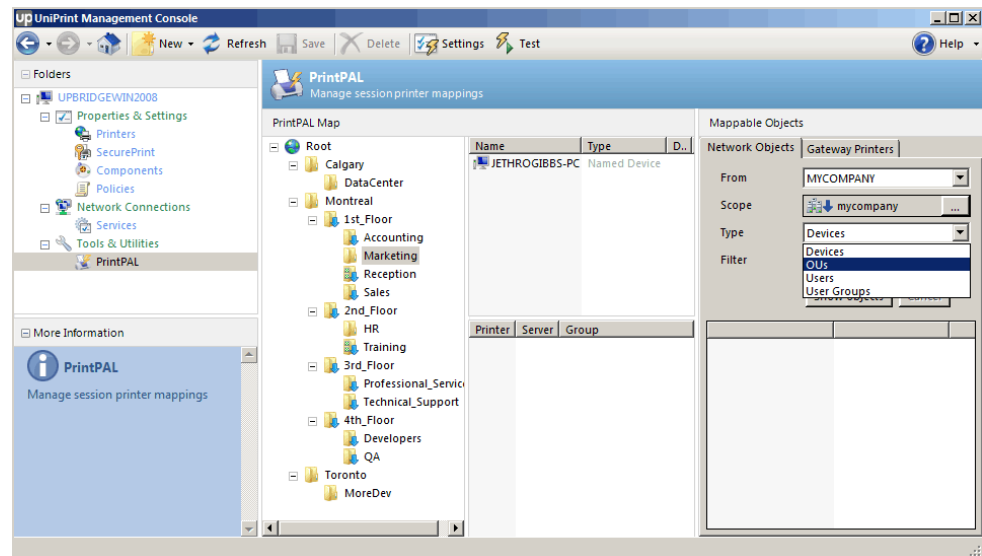


4. In the **Network Objects** tab, from the **From** list, click the domain from which you wish to map.

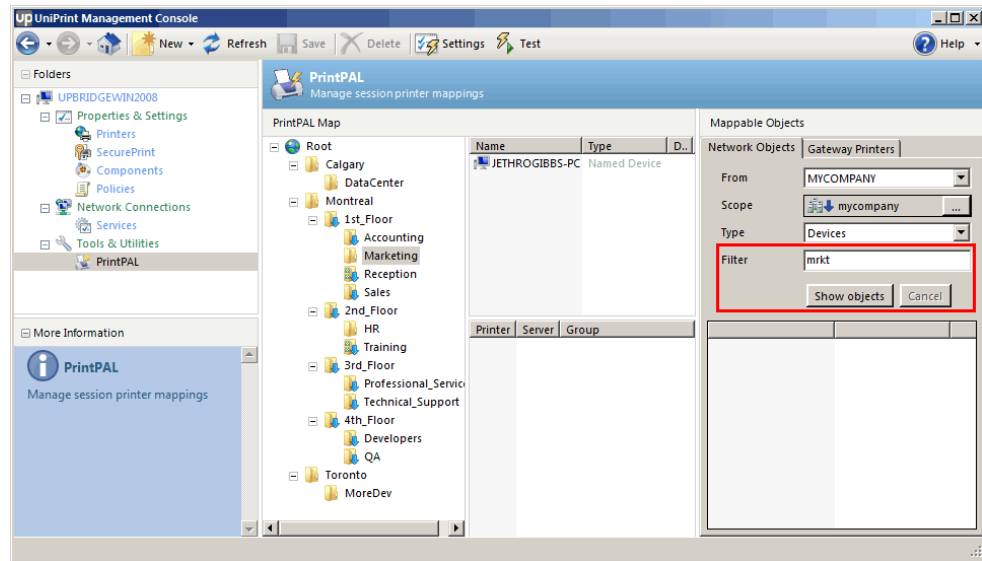
- Click  to select a scope of the domain and if children are to be included in the list below. Click **OK**.



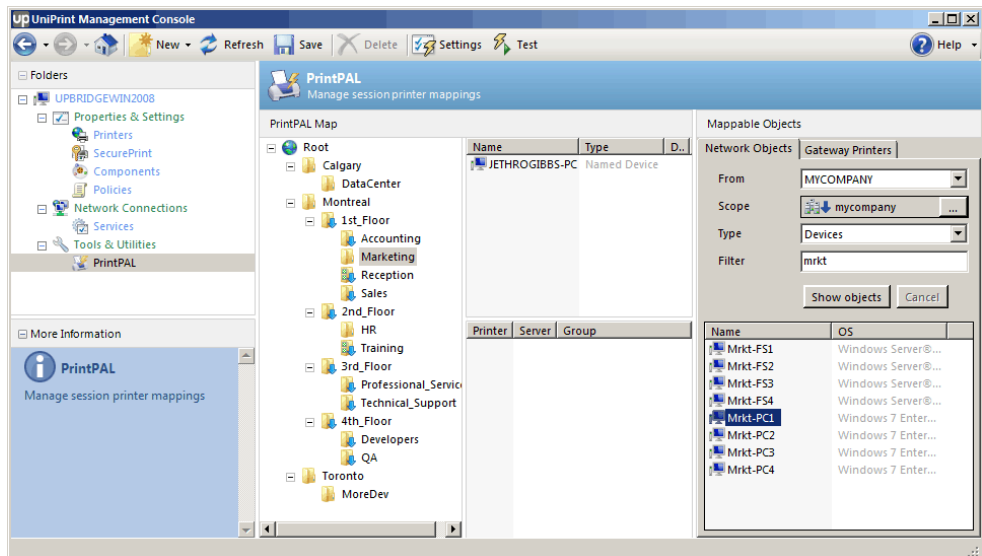
- From the **Type** list, click the type of object you want to map, for example, **Devices**, **OUs**, **Users** or **User Groups**.



- a. Beside **Filter**, enter in a character string that you want the list to filter and then click **Show Objects**.



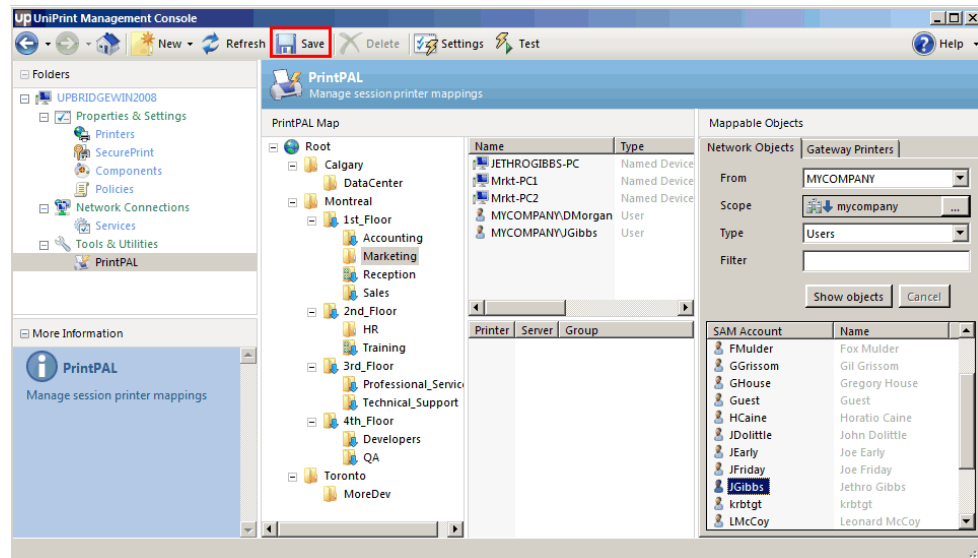
7. Click to select an object and then either double-click it or press **ENTER** to add it to PrintPAL map.



NOTE: To add multiple objects that appear consecutively in the list, click the first object you want to add, press **SHIFT** and then click the last object. Press **ENTER** to add them to the PrintPAL map. To add multiple objects that do not appear consecutively in the list, click to select an object, press **CTRL**, and then click the next object. Press **ENTER** to add the objects to the PrintPAL map.

8. Repeat steps 4 to 8, selecting groups and mapping objects to these groups as required.

9. Click **Save** to save your PrintPAL map.



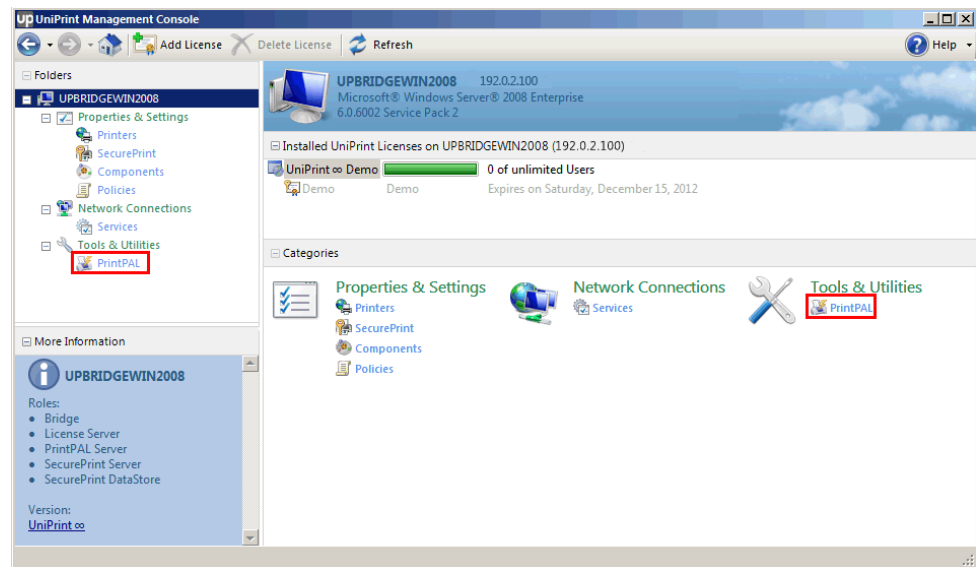
NOTE: In a trusted cross domain environment, in order for object SIDs to be resolved, enable **Allow service to interact with desktop** in the **UniPrint Control Service** properties, by doing the following:

1. Click **Start**, point to **Administrative Tools** and then click **Services**.
2. Double-click **UniPrint Control Service** and then click the **Log On** tab.
3. Under **Local System** account, select **Allow service to interact with desktop** and then click **OK**.

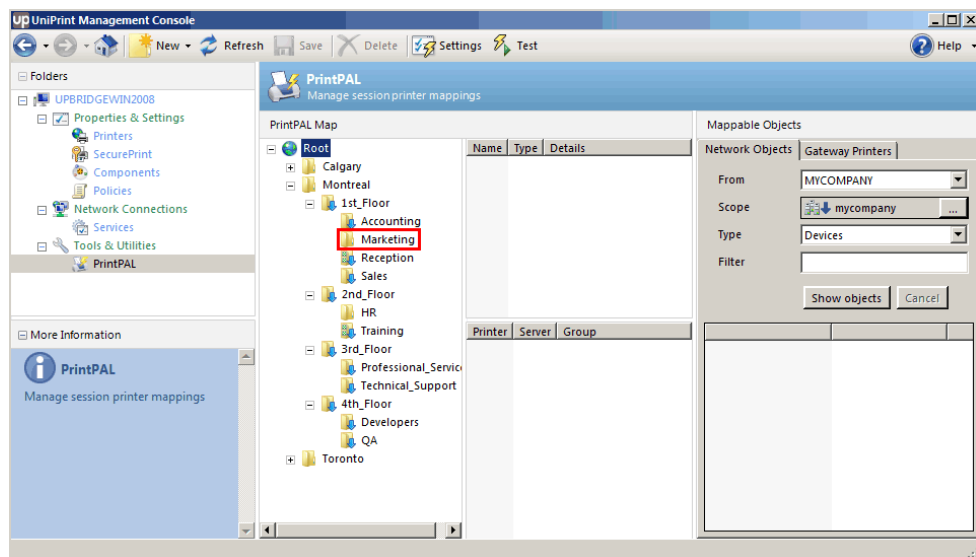
Mapping Printers to a Group in PrintPAL

1. On the UniPrint Bridge, open the **UniPrint Management Console**.

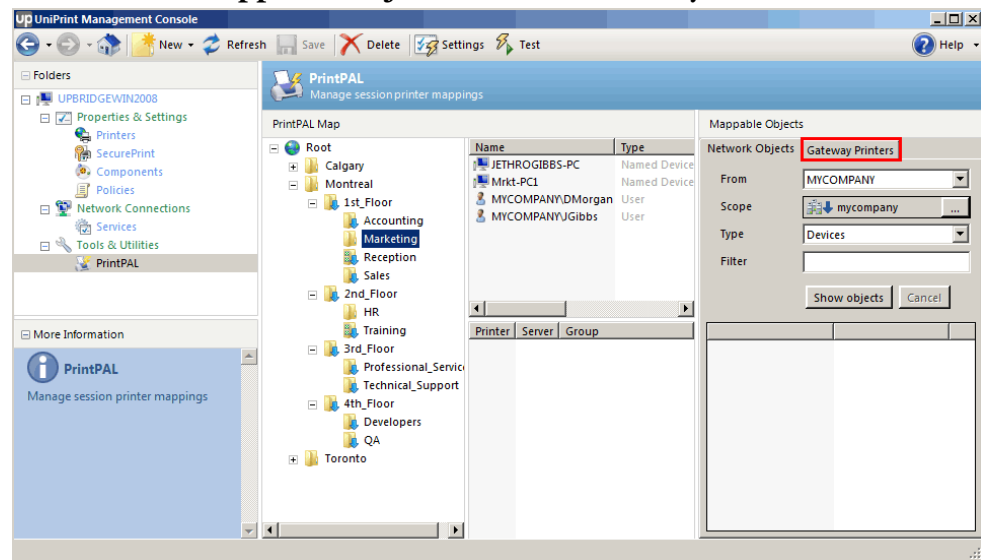
2. Under **Tools & Utilities**, click **PrintPAL**.



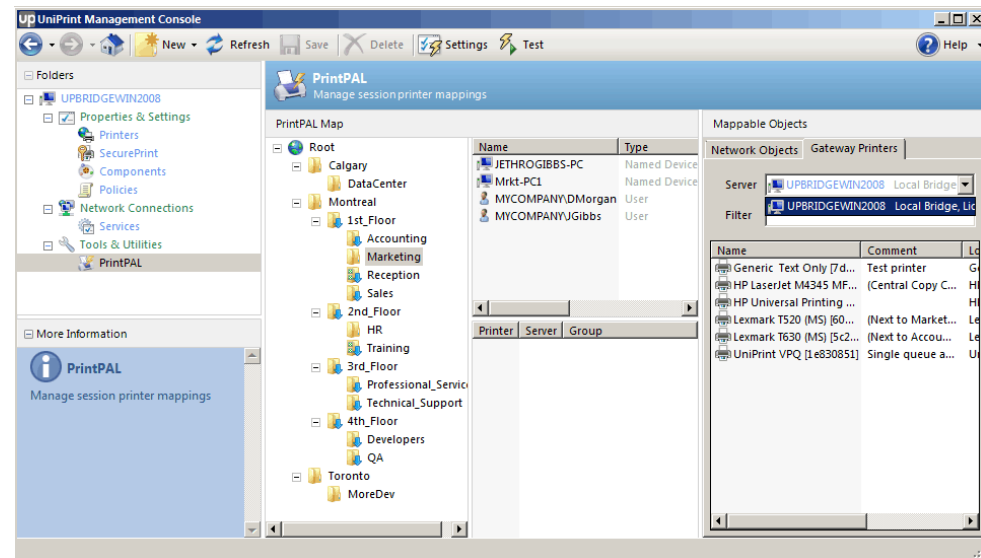
3. Under **PrintPAL Map**, click to select the group to which you want to map printers.



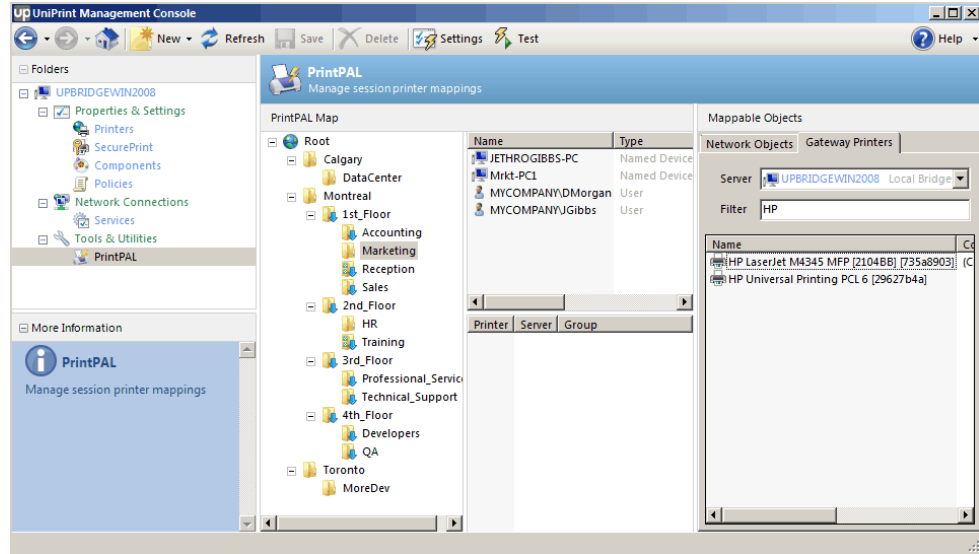
4. Under **Mappable Objects**, click the **Gateway Printers** tab.



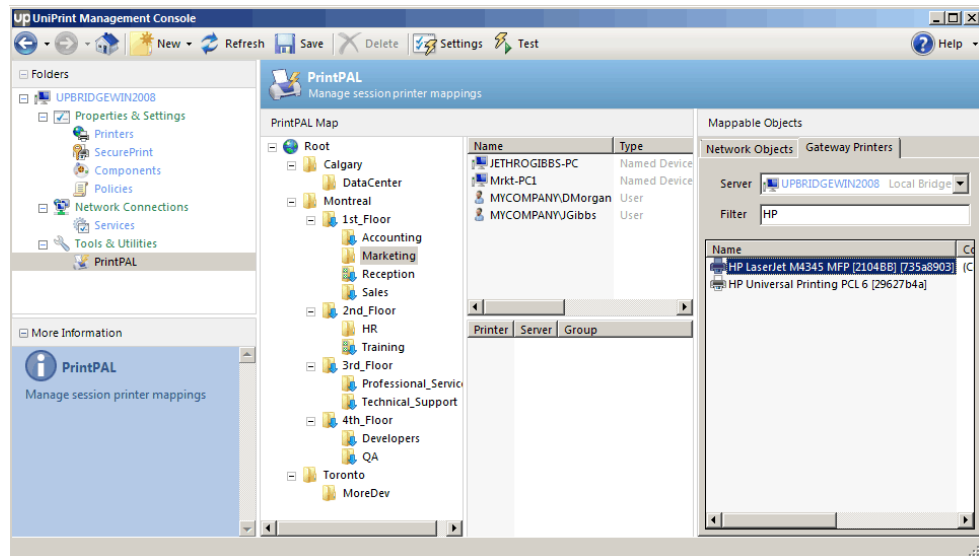
5. From the **Server** list, select the UniPrint Bridge whose Gateway Printers you want to map.



- a) Beside **Filter**, enter the character string with which to apply the filter to the resulting list and then press **ENTER**.

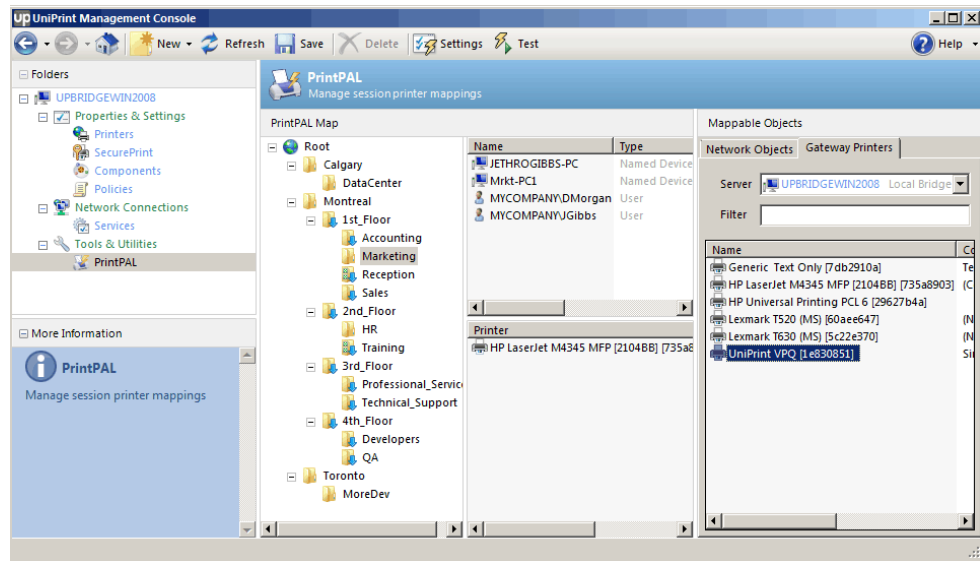


6. Click to select a Gateway printer and then either double-click it or press **ENTER** to add it to the PrintPAL map.

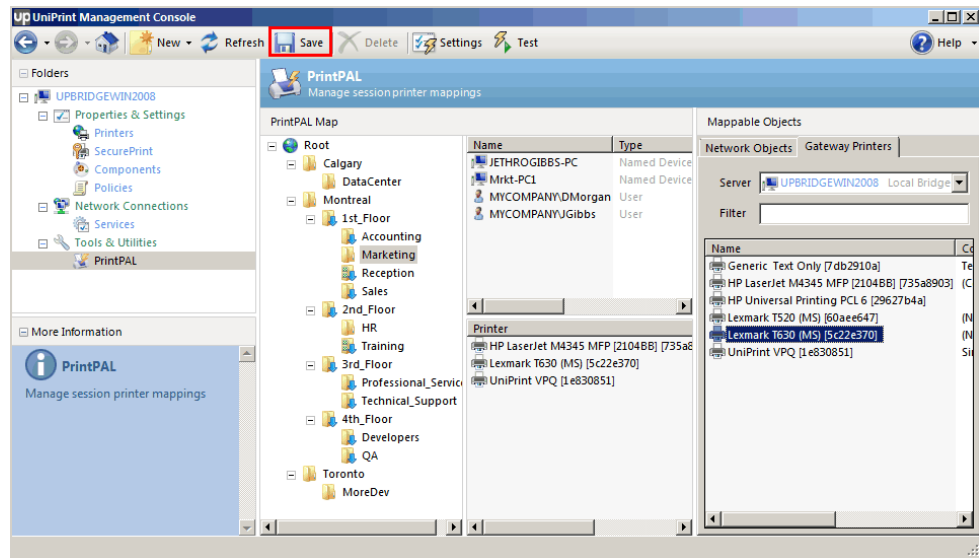


NOTE: To add multiple printers that appear consecutively in the list, click the first printer you want to add, press **SHIFT** and then click the last printer. Press **ENTER** to add your selection to the PrintPAL map. To add multiple printers that do not appear consecutively in the list, click a printer, press **CTRL**, and then click the next printer. Press **ENTER** to add your selection to the PrintPAL map.

7. Repeat steps 6 to 7, selecting groups and mapping printers as required.



8. Click **Save** to save your PrintPAL map.

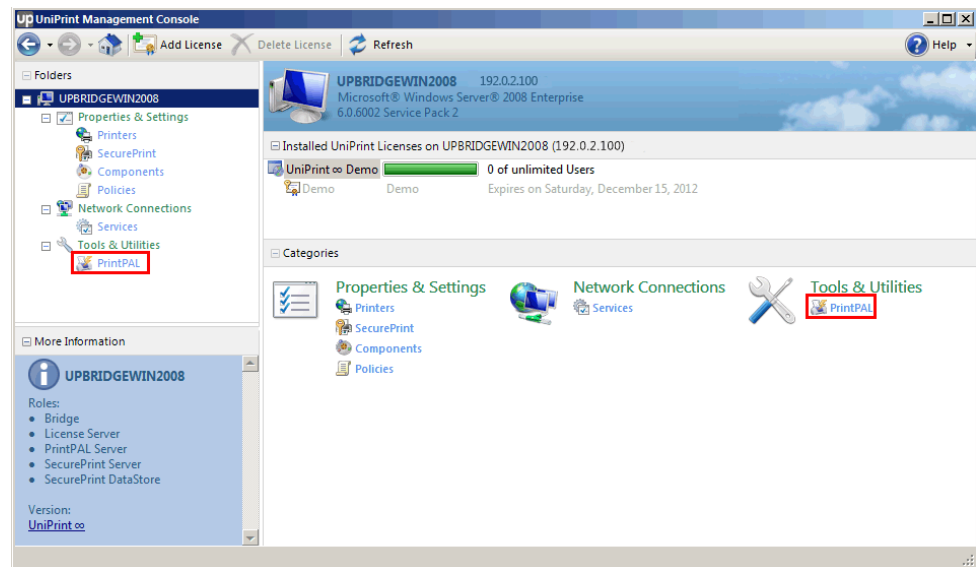


Setting Default Printers in PrintPAL

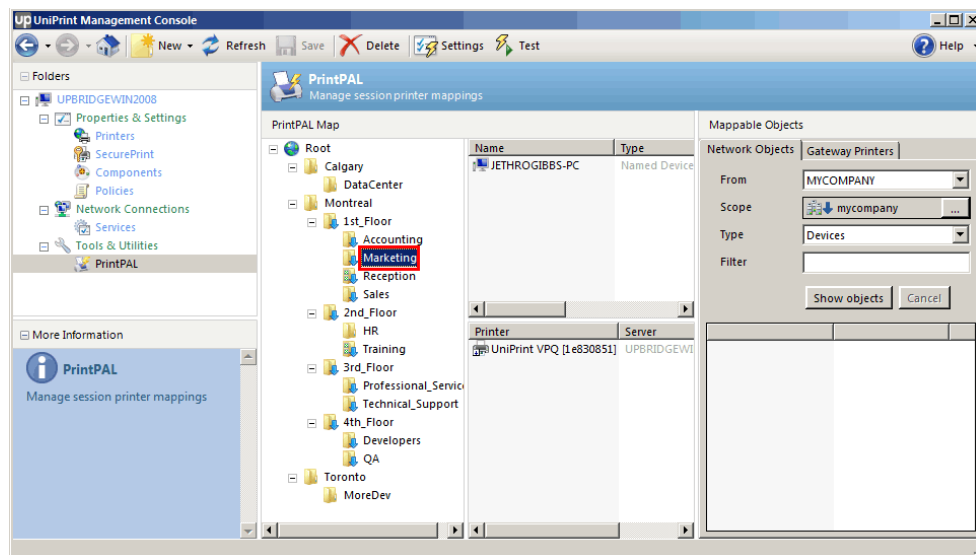
PrintPAL can be used to define the default printer for a group of devices. However, during an ICA/RDP session, a user can redefine their default printer through the, if the administrator has enabled it.

1. On the UniPrint Bridge, open the **UniPrint Management Console**.

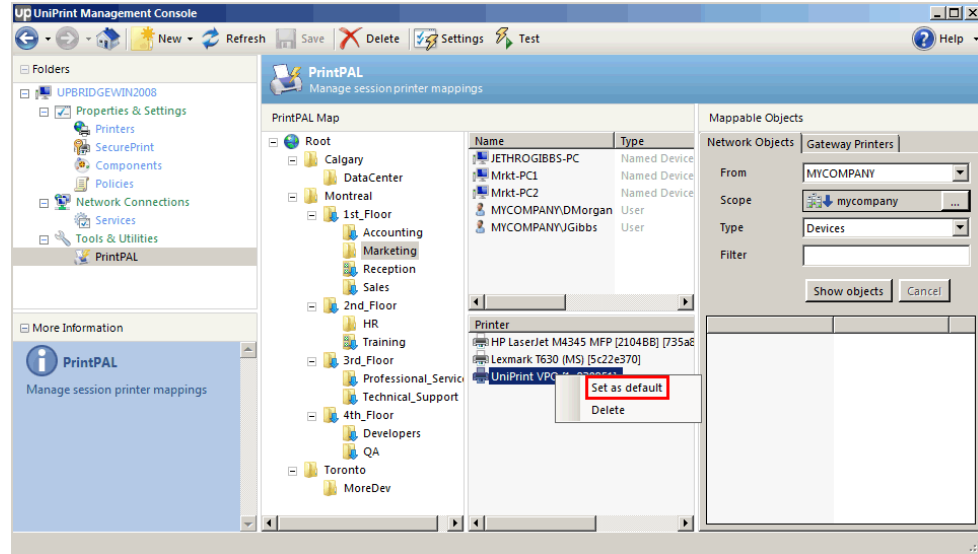
2. Under **Tools & Utilities**, click **PrintPAL**.



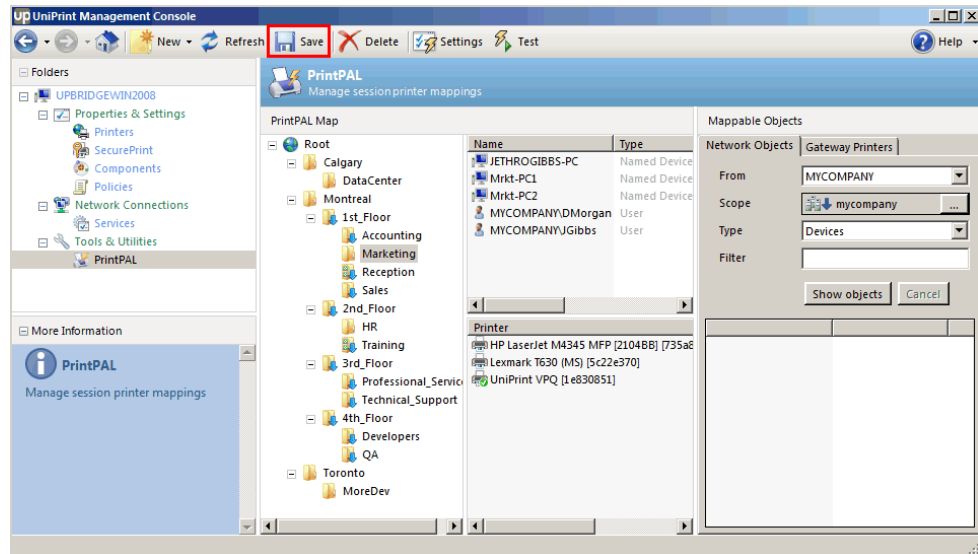
3. Under **PrintPAL Map**, click to select the group for which you want to define a default printer.



- In the **Printers** list, right-click a printer and then select **Set as default**.



- Click **Save** to save changes to the PrintPAL map.



Testing Your PrintPAL Map

A testing utility has been provided to test your object-to-printer mapping. With complex mappings, the resulting printer list may not be obvious. You can test your PrintPAL map by device name, IP address, user name or you can test a current session.

How PrintPAL Determines Which Printers to Map

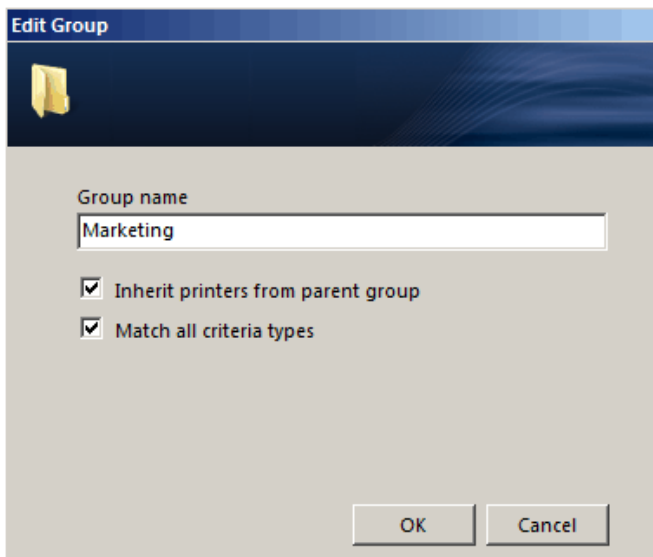
This testing utility mimics PrintPAL and searches the map in the following order to decide which printers to map to a session:

1. Device name or wildcard
2. Device OU
3. Device IP address or IP address range (IPv4)
4. User name
5. User group
6. User OU

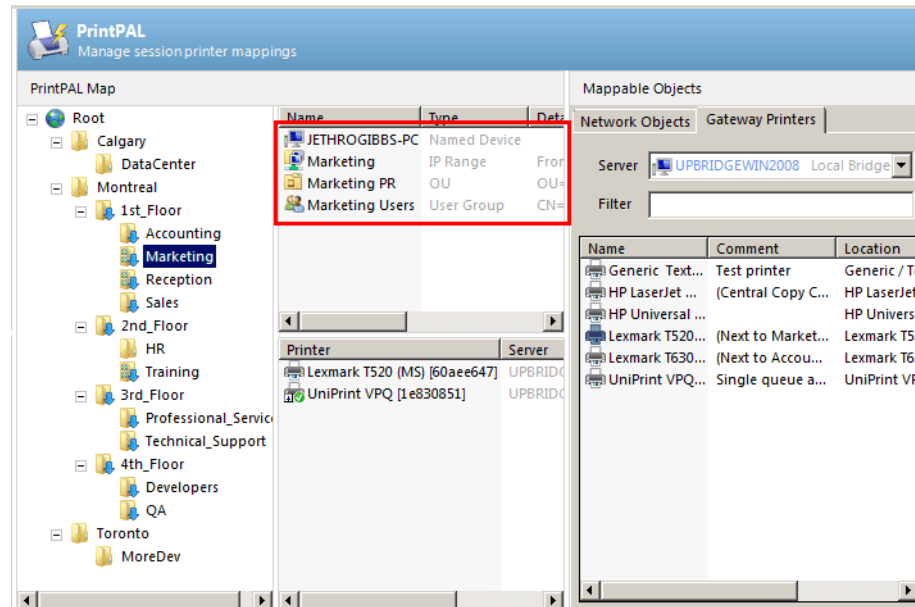
EXAMPLE: In a PrintPAL map a named device has been mapped to Printer A and an IP range is mapped to Printer B. If this named device has an IP address within the IP range, the test utility and PrintPAL will map Printer A to the session and will not continue to map any printers mapped to subsequent parameters. The result of using this utility is a consolidated list of which printers are mapped to a particular session.

New in version 8.1 is the **Match all criteria types** option. Enabling this option changes how PrintPAL decides which printers to map to a session. In order for printers to be mapped the following statement must be TRUE: *(DeviceName OR OU) AND DeviceIPAddress AND (UserName OR UserGroup)*.

EXAMPLE: The **Marketing** group is created with **Inherit printers from parent group** and **Match all criteria types** enabled.



A named device, an IP range, an OU, and a user group are mapped to the Marketing group.

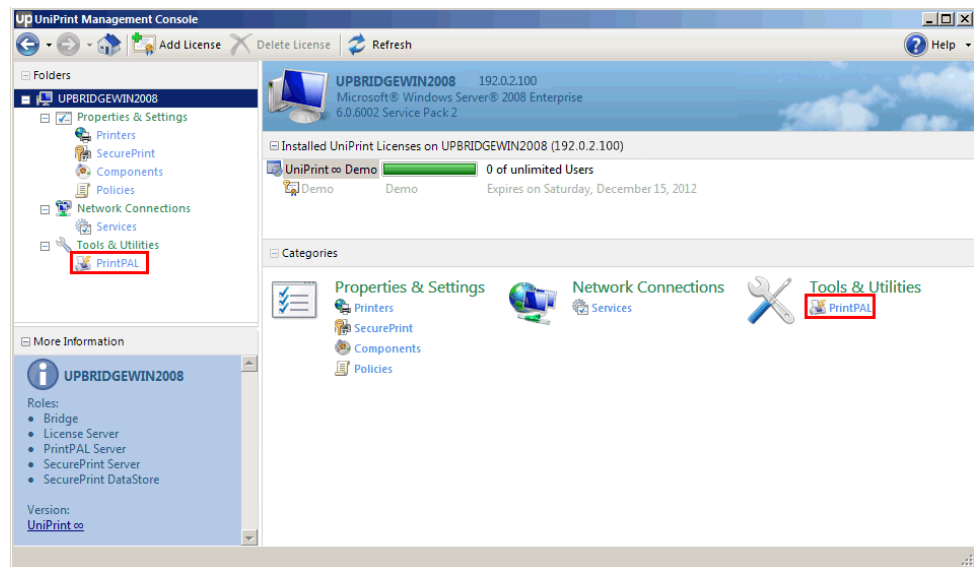
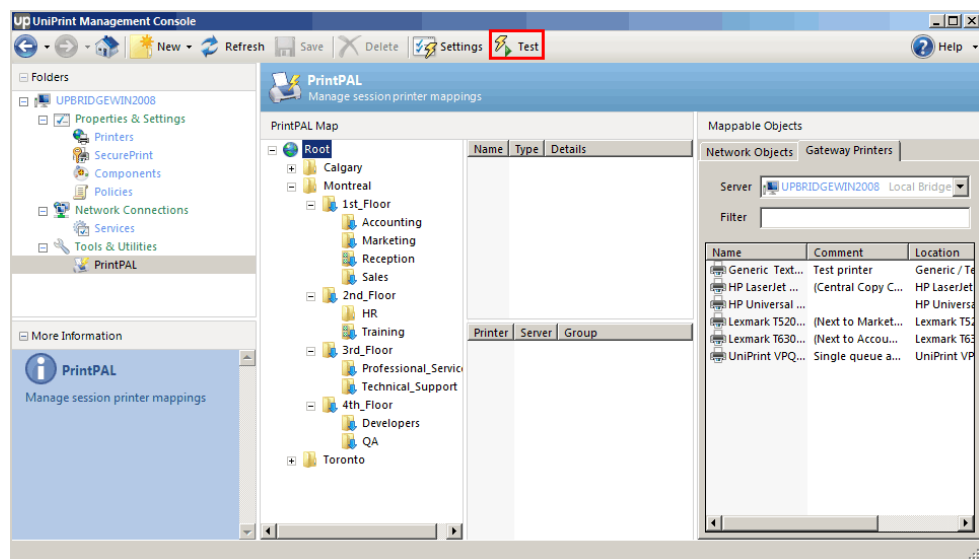


Only the session that is logging in from the device JETHROGIBBS-PC, from within the specified IP range and is a member of either the Marketing PR OU or the Marketing Users user group will have the Lexmark T520 and the UniPrint VPQ mapped to it.

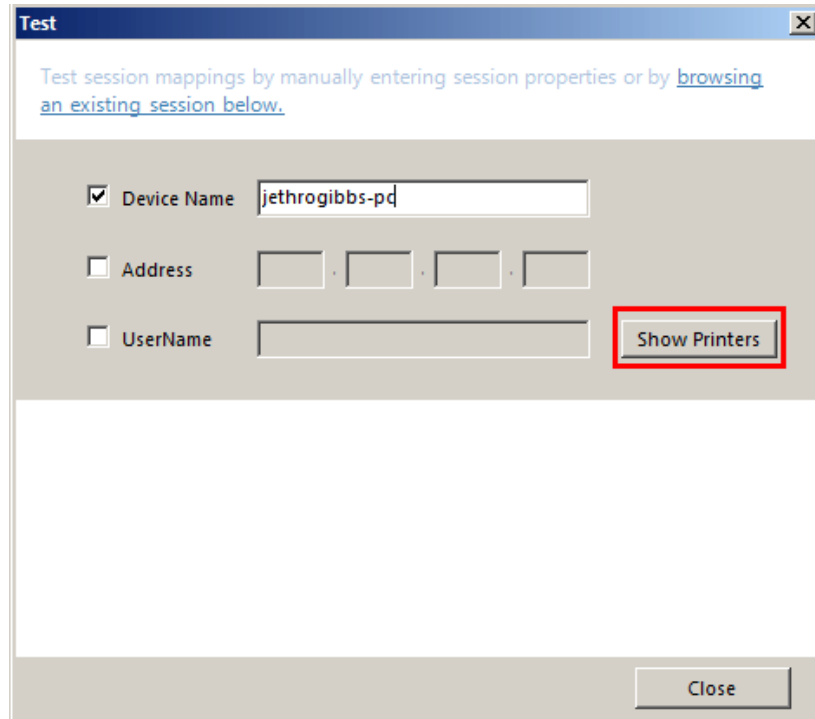
If another user group is added, the user logging in would still continue to have access to the mapped printers although the user is not a member of the newly added user group since the user is a member of at least one other user group listed.

Testing By Device Name, IP Address or User Name

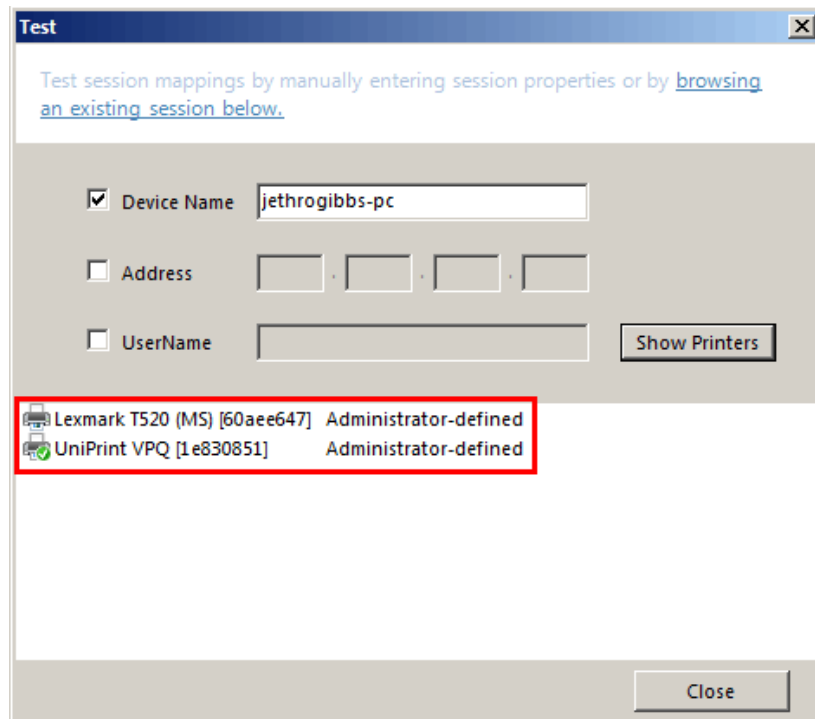
1. On the UniPrint Bridge, open the **UniPrint Management Console**.

2. Under **Tools & Utilities**, click **PrintPAL**.3. Click anywhere within your PrintPAL map and then click **Test**.

4. Select the object you would like to test. For example, device name, IP address or user name and then enter the parameter to test. Click **Show Printers**.



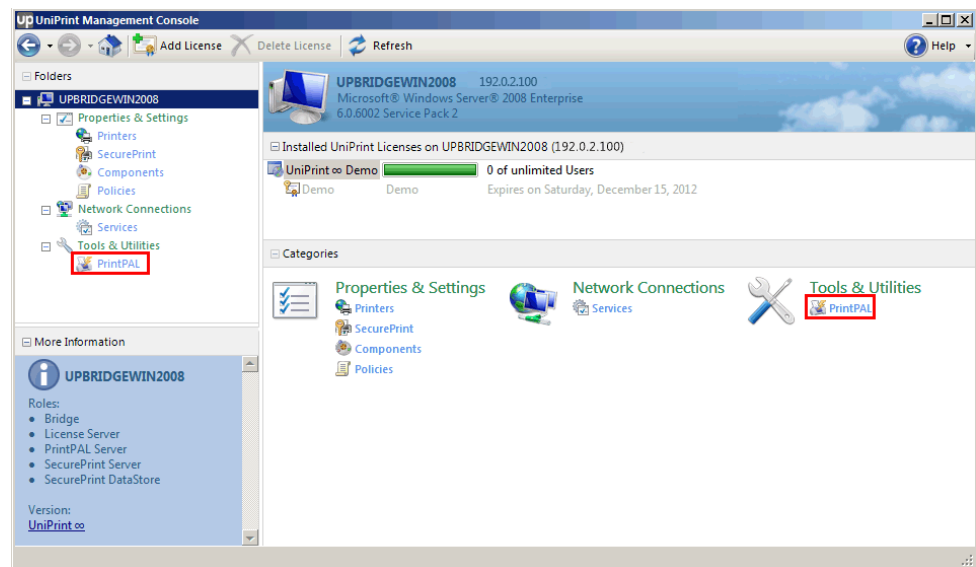
5. All of the Gateway printers that are mapped to that particular object should appear in the printer list.



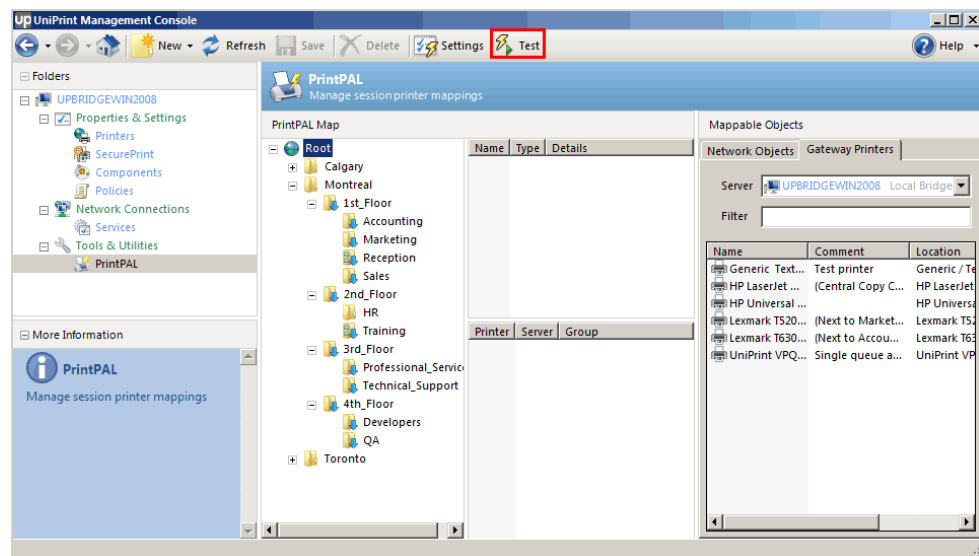
- Click **Close** to exit testing.

Testing A Current Session

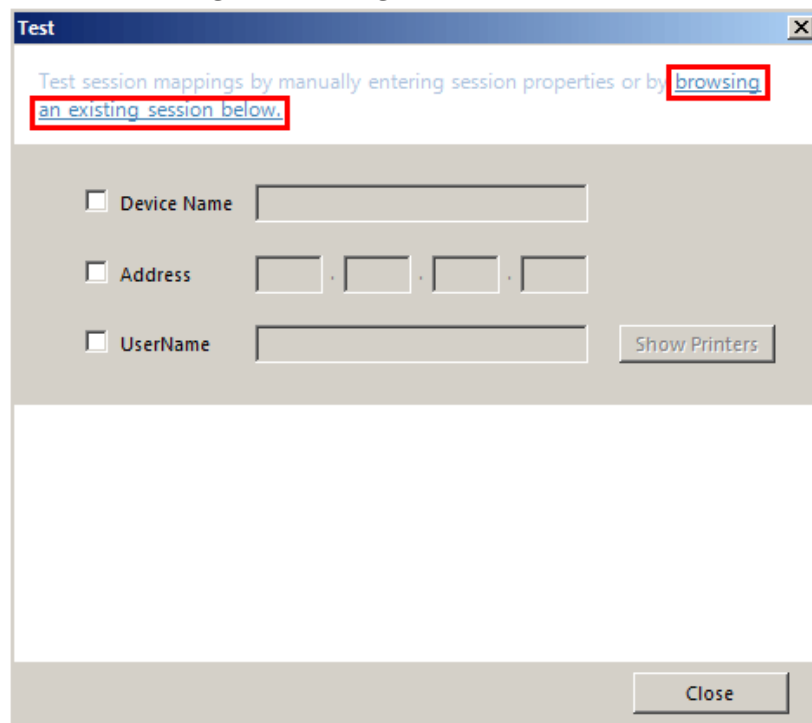
- On the UniPrint Bridge, open the **UniPrint Management Console**.
- Under **Tools & Utilities**, click **PrintPAL**.



- Click anywhere within your PrintPAL map and then click **Test**.



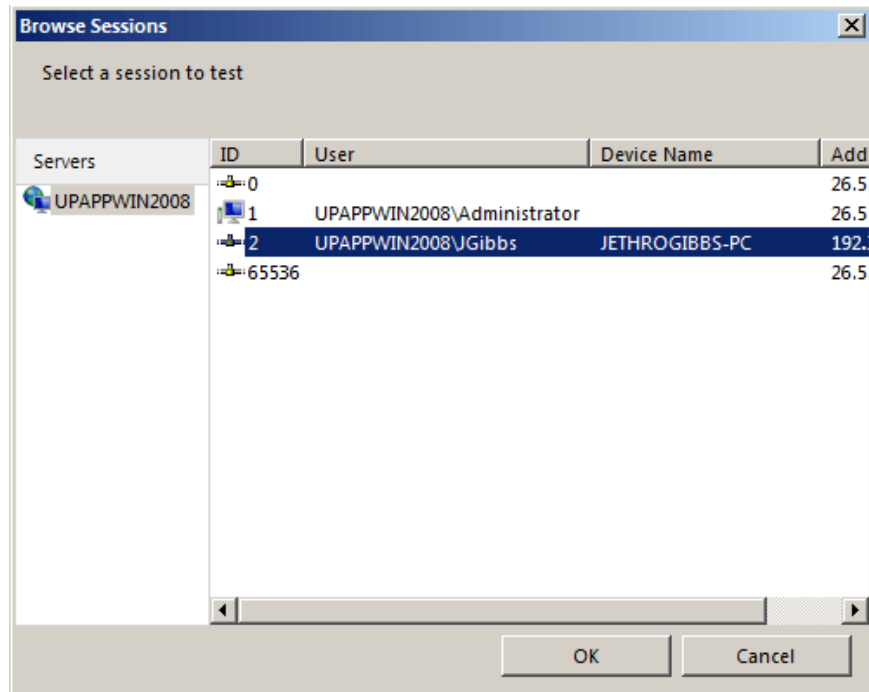
4. Click **browsing an existing session below**.



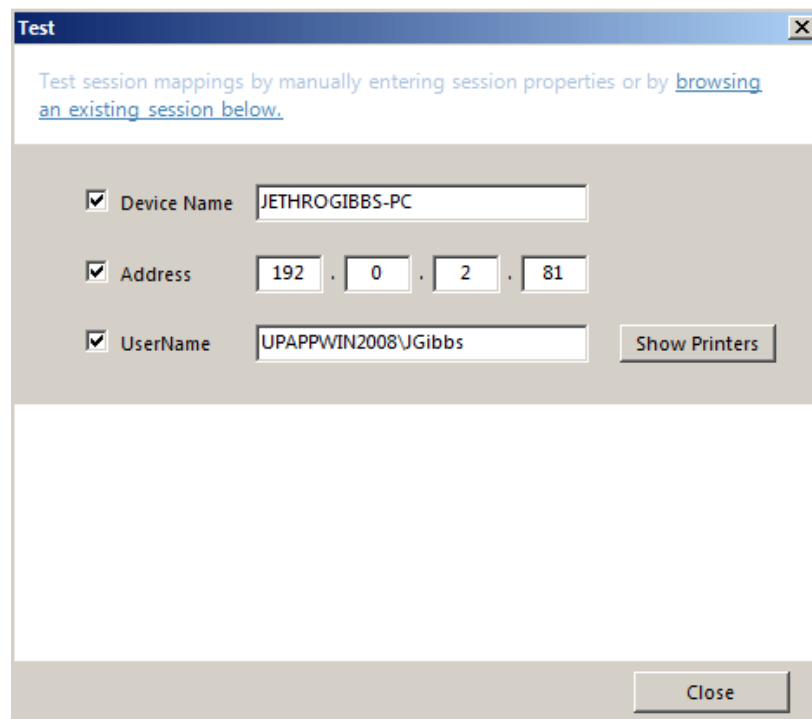
5. Enter your administrative credentials for the application server and then click **OK**.



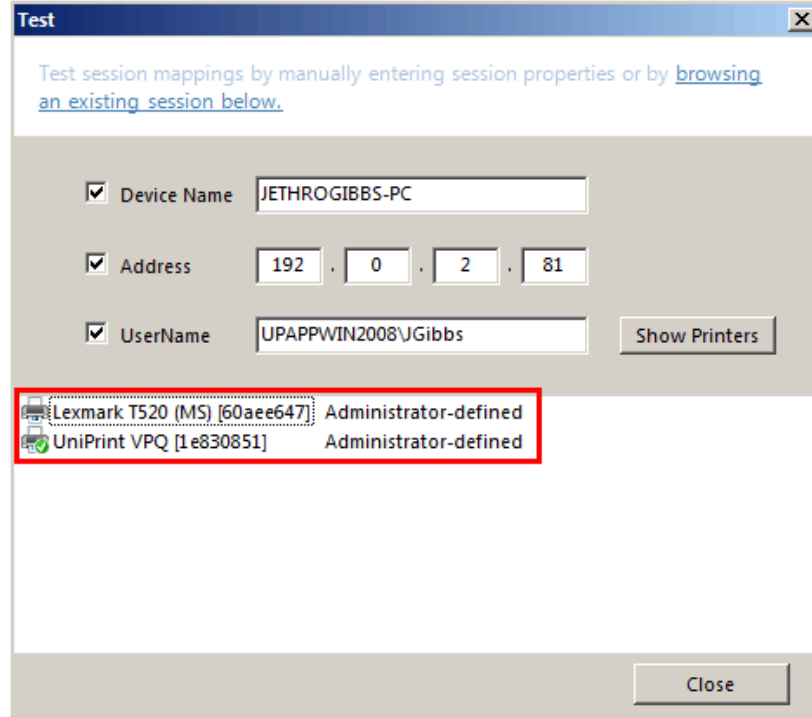
6. Click to select the session to test and then click **OK**.



7. The **Device Name**, **IP Address** and **UserName** parameters will be populated. Click **Show Printers**.



8. All of the Gateway printers that are mapped to this session will appear in the printer list. Click **Close** to exit testing.

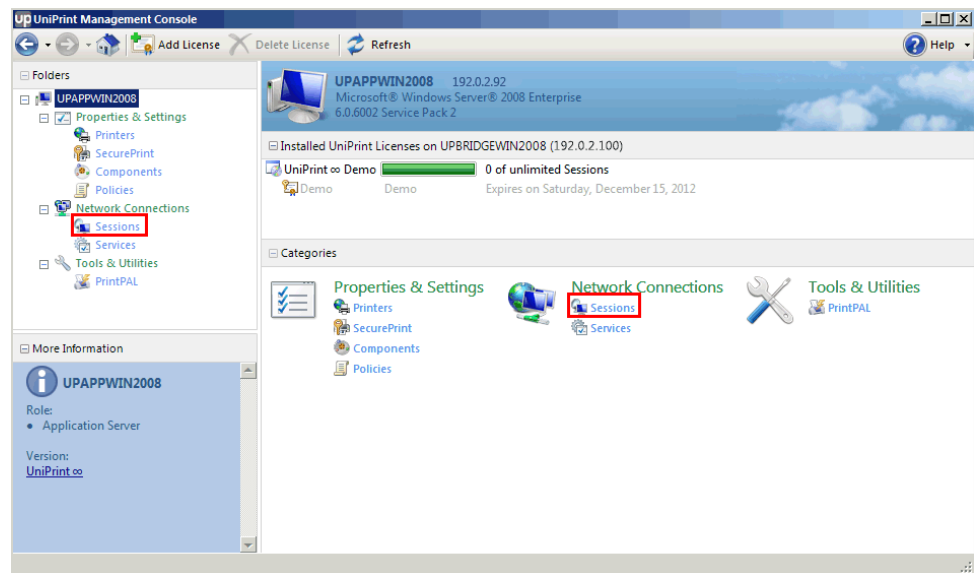


Setting PrintPAL To Automatically Map Printers When A Session Is Started

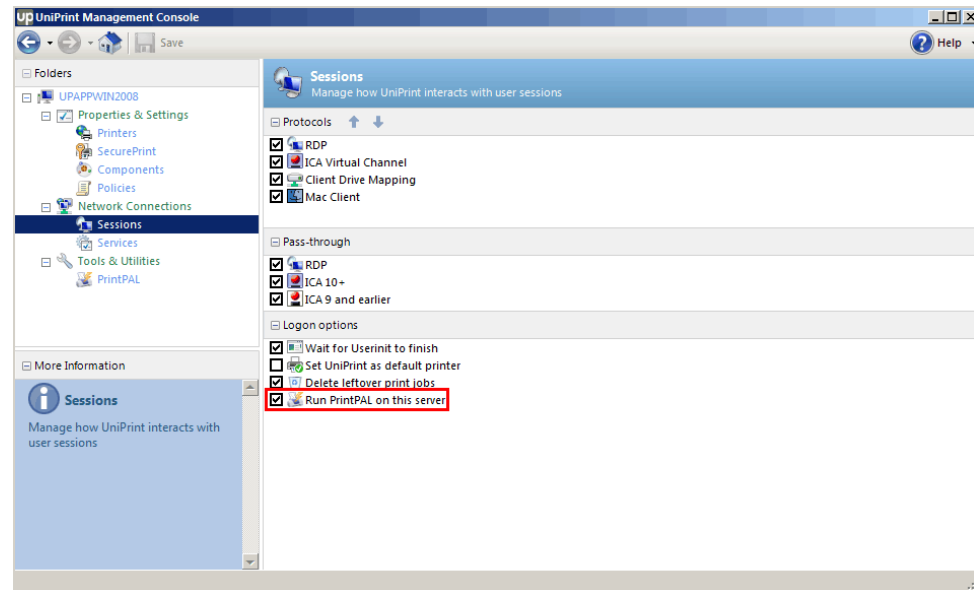
PrintPAL can be set to automatically run and map printers when the user starts a session on the UniPrint Application Server.

1. On the UniPrint Application Server, open the **UniPrint Management Console**.

2. Under **Network Connections**, click **Sessions**.



3. Under **Logon options**, select **Run PrintPAL on this server** and then click **Save**.



The complete SecurePrint solution incorporates the vPad, the SecurePrint Server, Data store and Virtual Print Queue (VPQ). These components work together to provide efficient and secure pull-printing, while helping to increase corporate sustainability.

Configuring UniPrint SecurePrint



WARNING! In order to utilize encryption, all domain-level certificates must be up-to-date and valid on all UniPrint Bridges. For more information, see <http://support.microsoft.com/kb/929103>.

Installing the UniPrint vPad device

Before installing the vPad ensure that you have the power cable (included) and a network cable.

1. Find an appropriate location to mount the vPad device.
2. Insert the power cable into the bottom of the vPad device.
3. Insert the network cable into the bottom, left-most connector of the vPad device.
4. Connect the network cable into a network outlet, switch or router.
5. Plug the device into an electrical outlet.
6. Power on the vPad and it will auto-detect the closest UniPrint Print Server.

Running the SecurePrint Emulator

For testing purposes, UniPrint has provided the SecurePrint emulator. By running the emulator on a workstation, you can mimic how the actual vPad

device will work in your environment. This workstation must be connected to the network in order for the emulator to auto-discover your print servers.

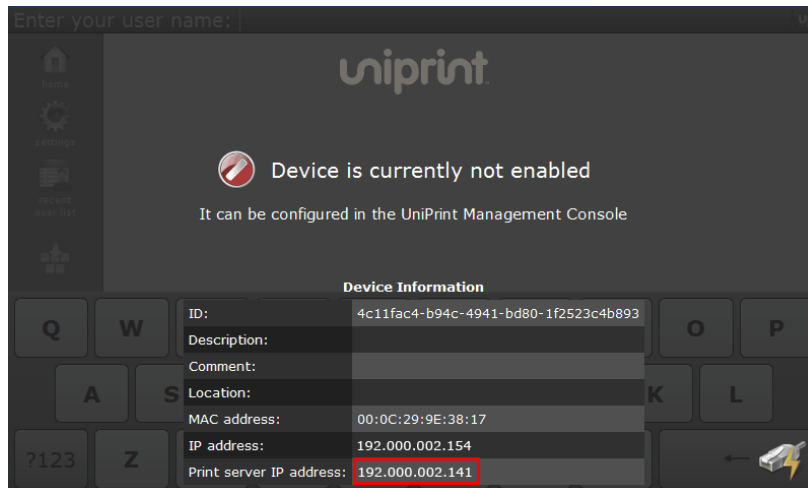
To launch the SecurePrint emulator, do the following:

1. From the UniPrint Installation package, run the self-extracting executable file, **SecurePrint Emulator.exe**.

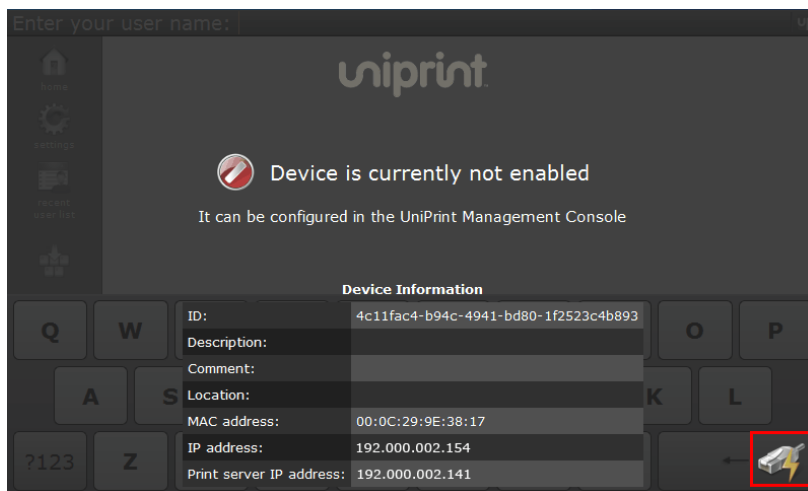
Activating the UniPrint vPad

Follow these instructions for both the vPad device and the SecurePrint emulator.

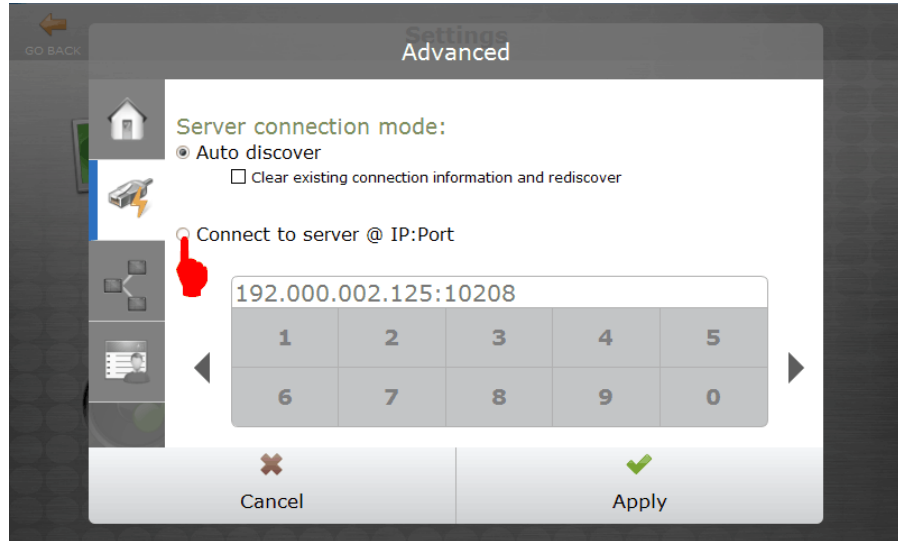
1. Ensure that the vPad is connected to the correct UniPrint Print Server that has **SecurePrint print server components** installed.



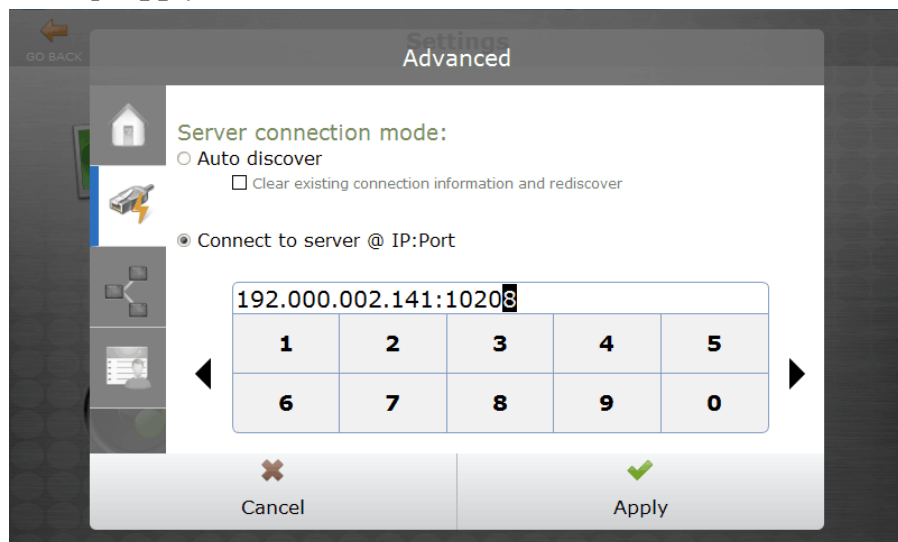
- a. If the **Print Server IP address** is pointing to the wrong UniPrint Print Server, tap **Settings**.



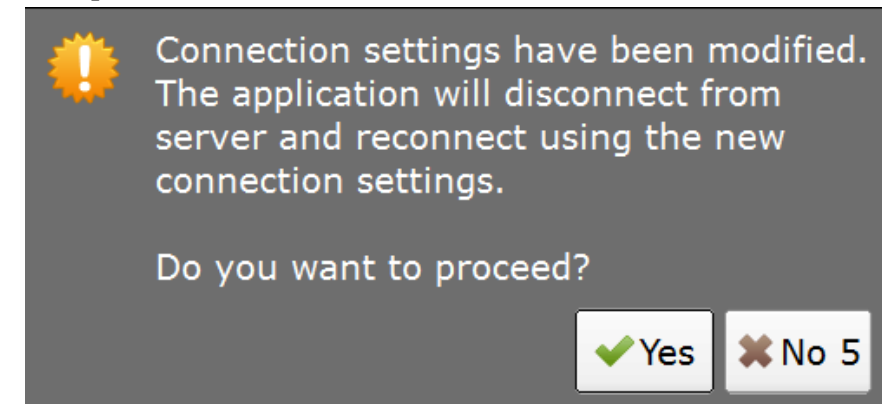
- b. Tap **Connect to Server @ IP:Port** and then change the IP address and port number to that of the desired UniPrint Print Server.



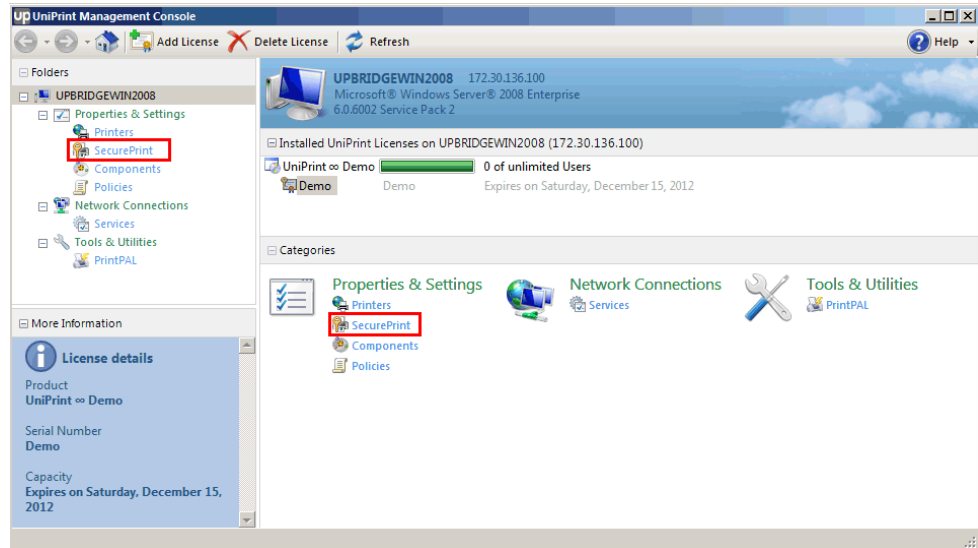
- c. Tap **Apply**.



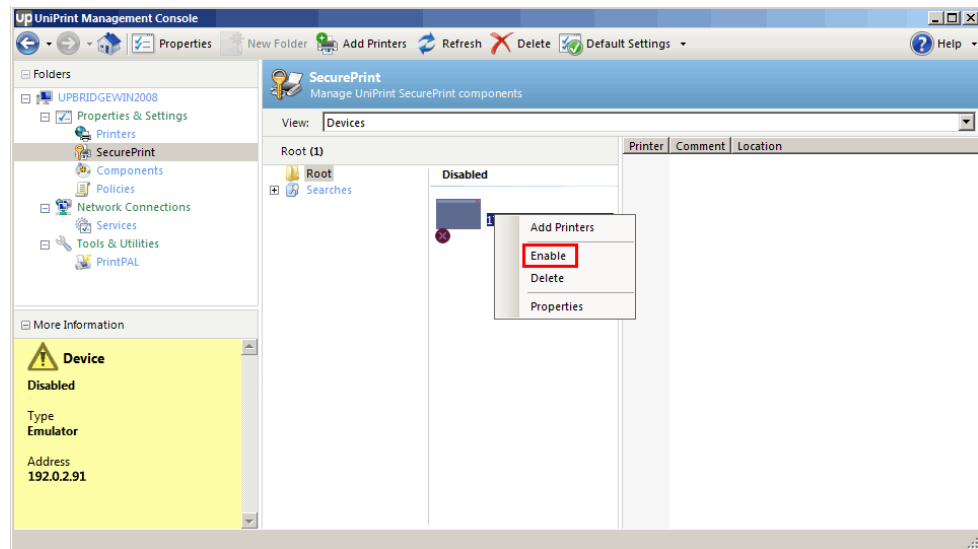
- d. Tap **Yes**.



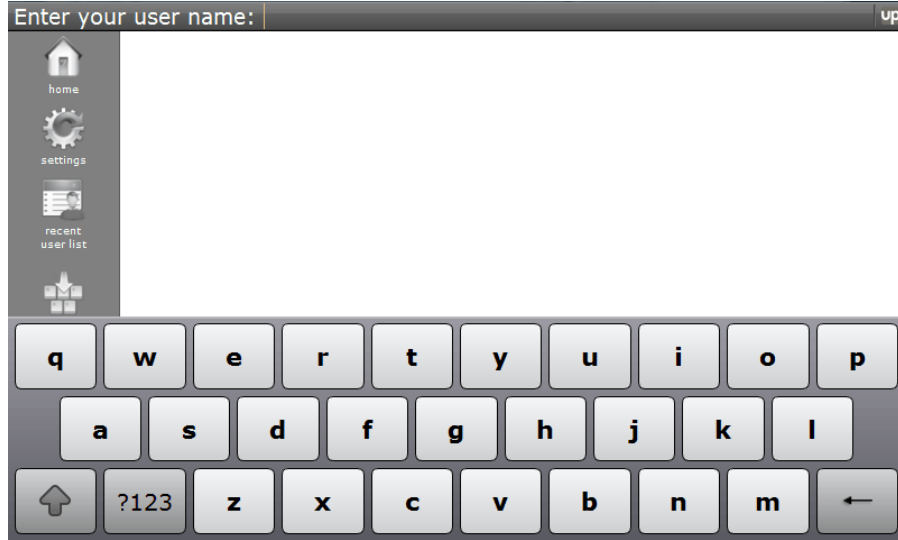
2. From a UniPrint component, open the **UniPrint Management Console**.
3. Under **Properties & Settings**, click **SecurePrint**.



4. Click **Refresh** if the vPad does not immediately appear.
5. Right-click the vPad device and then select **Enable**.



6. Once enabled, return to the vPad and the user name entry screen should appear.

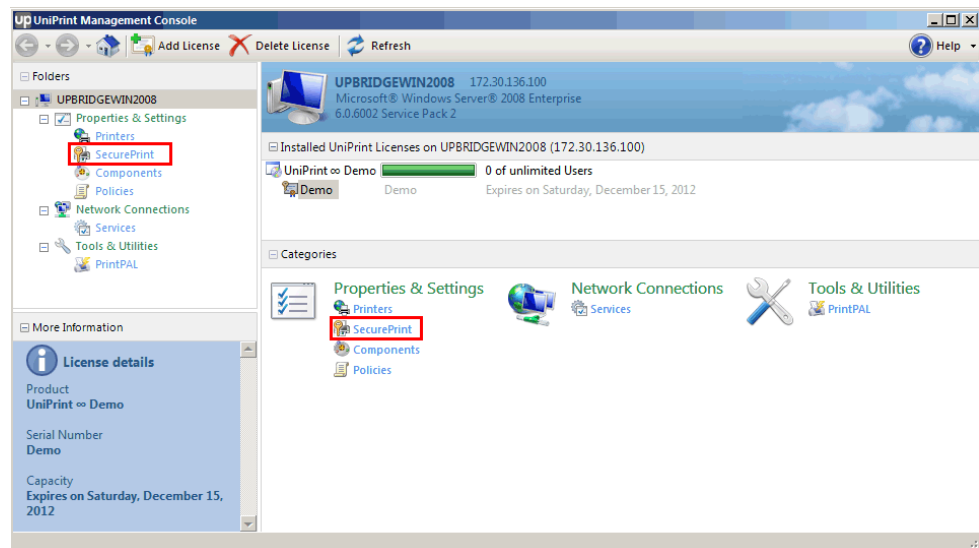


Adding Printers to the vPad

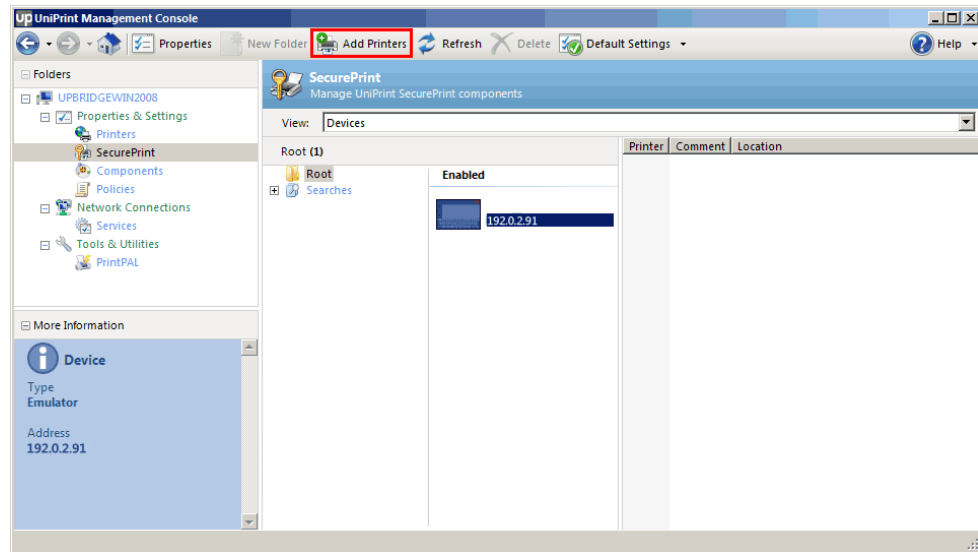
Each vPad can be used to release print jobs for one or more printers on the network. When adding a printer, you can force the user to enter a password.

To add a printer to a vPad, do the following:

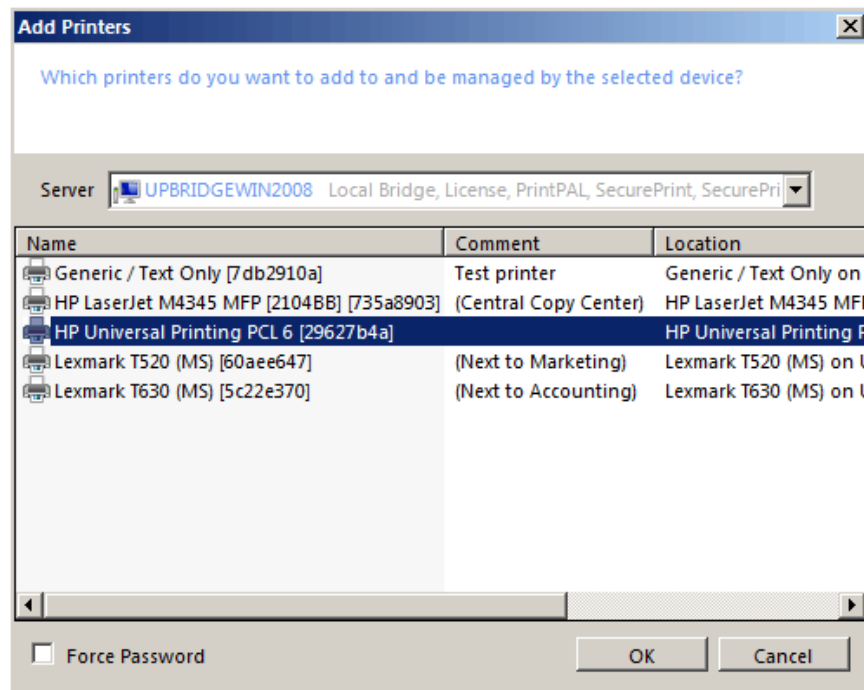
1. From a UniPrint component, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **SecurePrint**.



3. Click to select an enabled vPad and then click **Add Printers**.

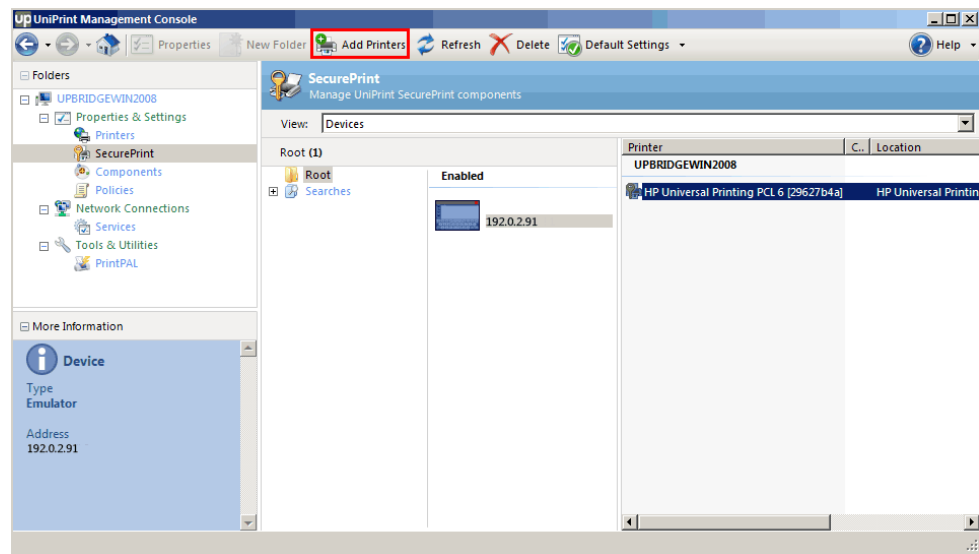


4. Click to select a printer and then select **Force Password** to make users enter a password in order to release their print job(s). *Note: To select multiple printers, click to select a printer and then hold down the **SHIFT** key for consecutive printers or the **CTRL** key for non-consecutive printers.*



5. Click **OK**.

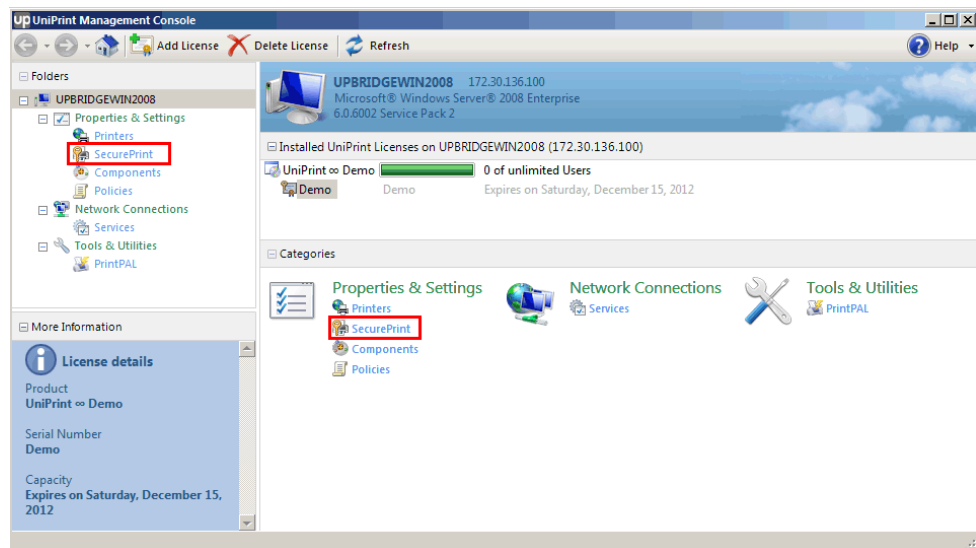
- Repeat steps 4 to 6 to add more printers as required.



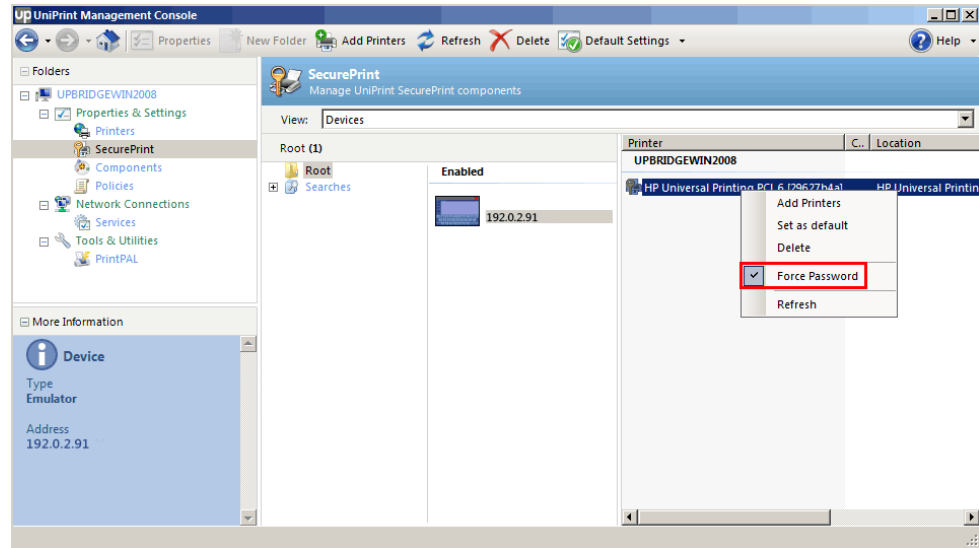
Disabling the Force Password option on a printer

If you don't want to force your users to enter a password, then do the following:

- From a UniPrint component, open the **UniPrint Management Console**.
- Under **Properties & Settings**, click **SecurePrint**.



3. Right-click the printer that you want to remove the Force Password option from and then select **Force Password**.

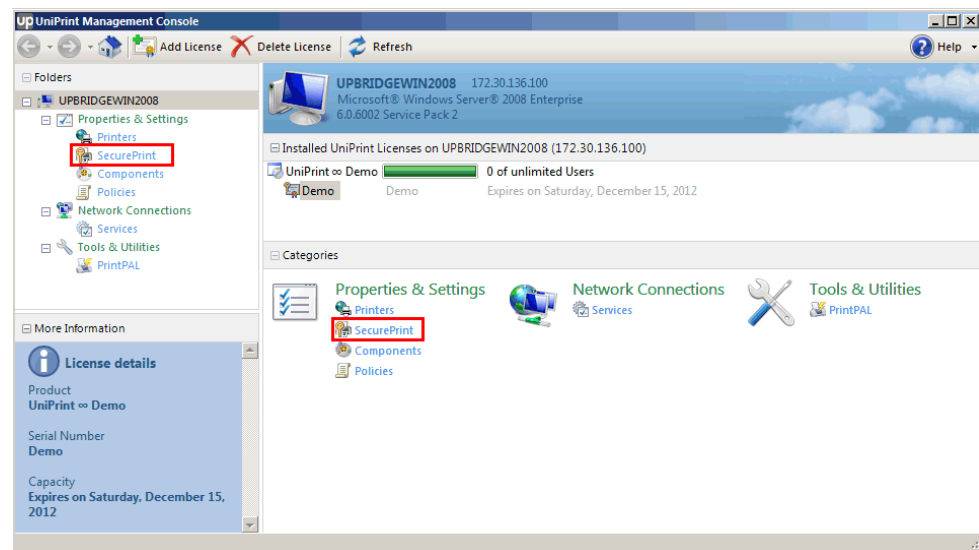


4. The golden key will be removed from the printer icon to indicate that this printer no longer requires a SecurePrint password in order to release print jobs.

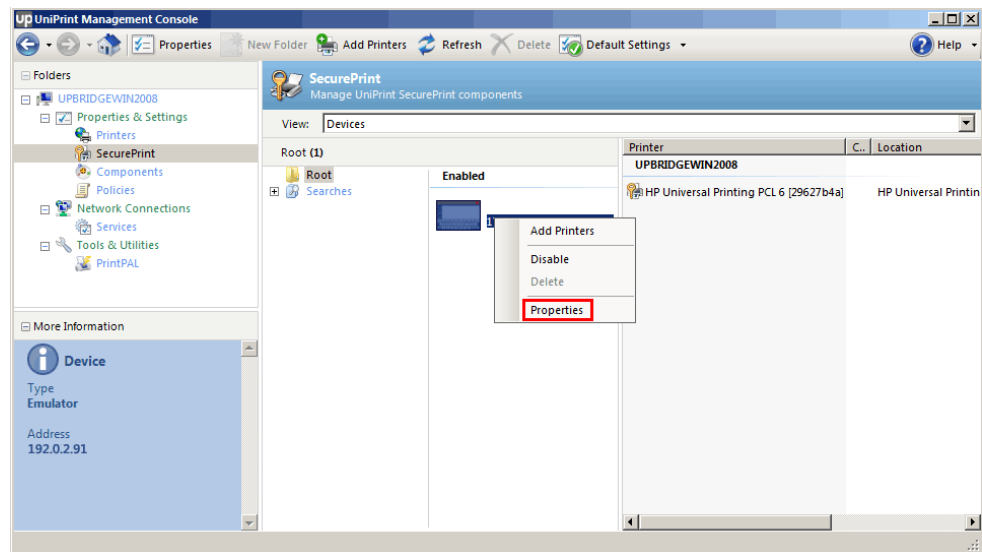
Changing SecurePrint Settings for A Single vPad Device

To edit the settings for a single vPad device, do the following:

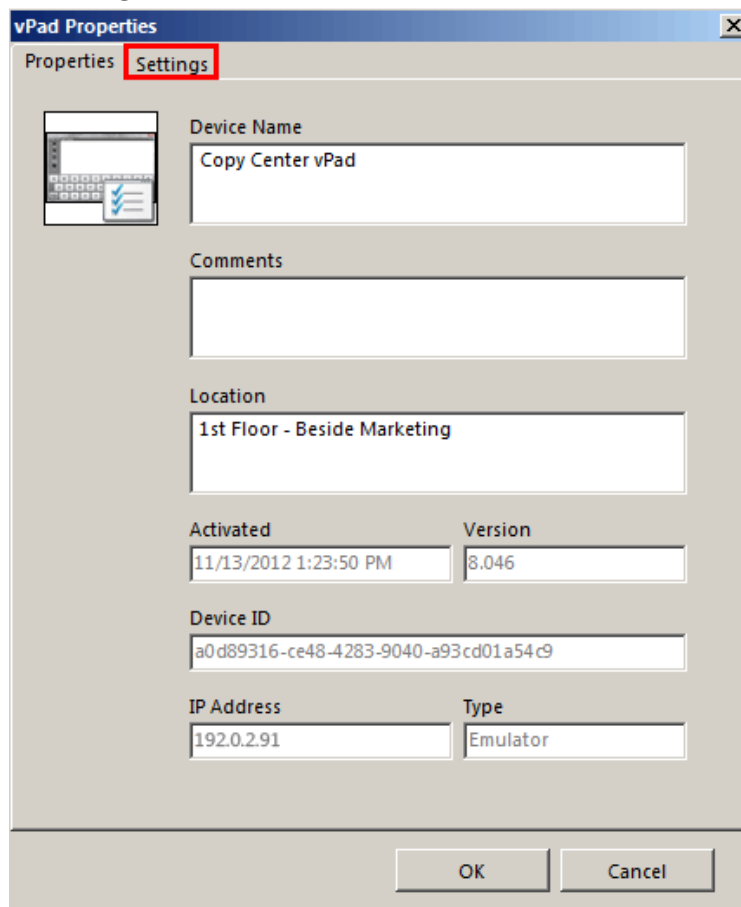
1. From a UniPrint component, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **SecurePrint**.



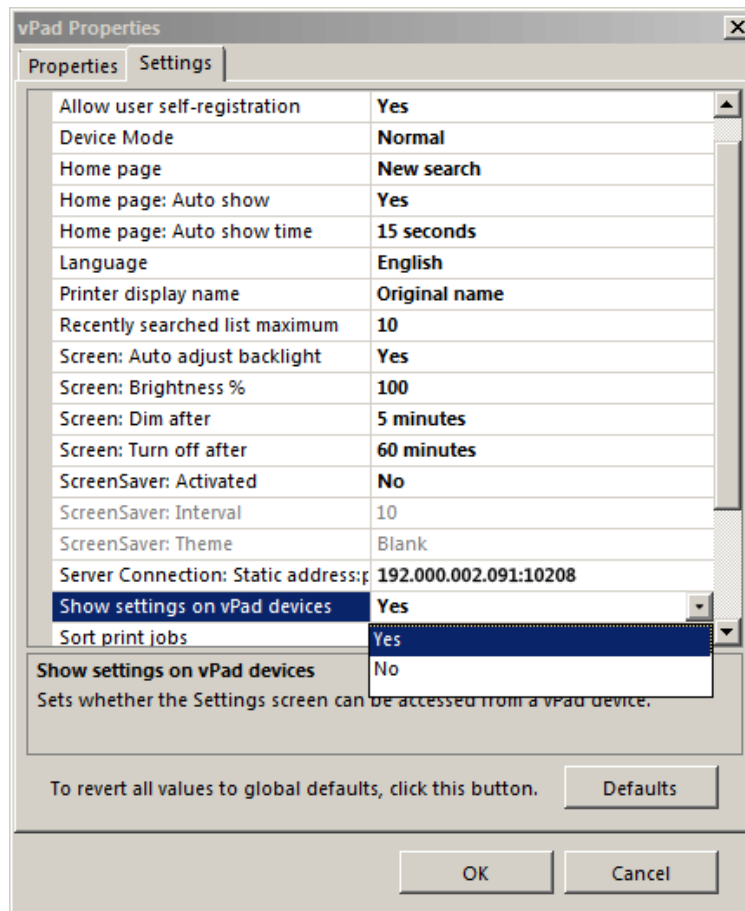
3. Right-click the device and then select **Properties**.



4. Enter in a **Device Name**, **Comments** and **Location** and then click the **Settings** tab.



5. Change the desired settings and then click **OK**.



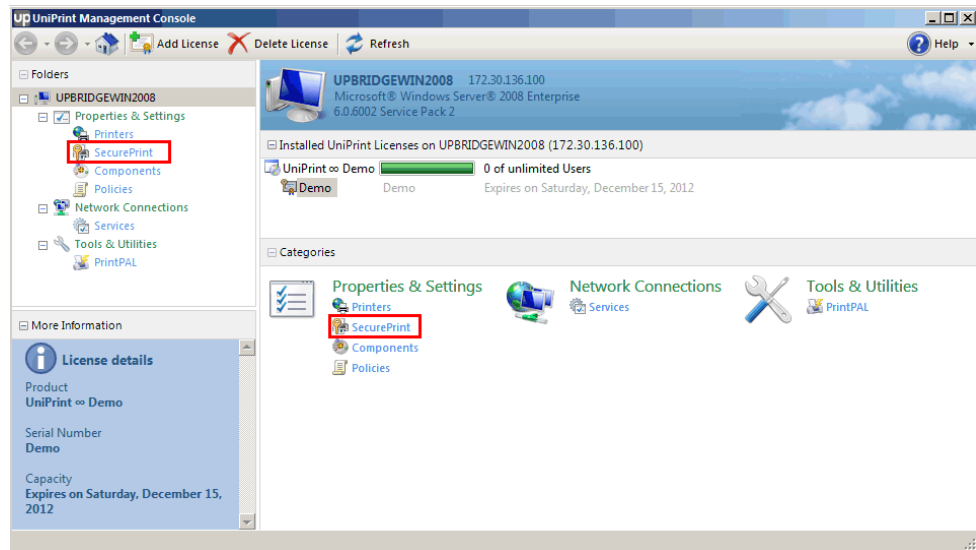
Changing SecurePrint Settings Globally for All vPad Devices

vPad device settings such as brightness, default home page and whether to show Settings on the device, and password settings such as Force Password can be applied to all devices through **Default Settings**.

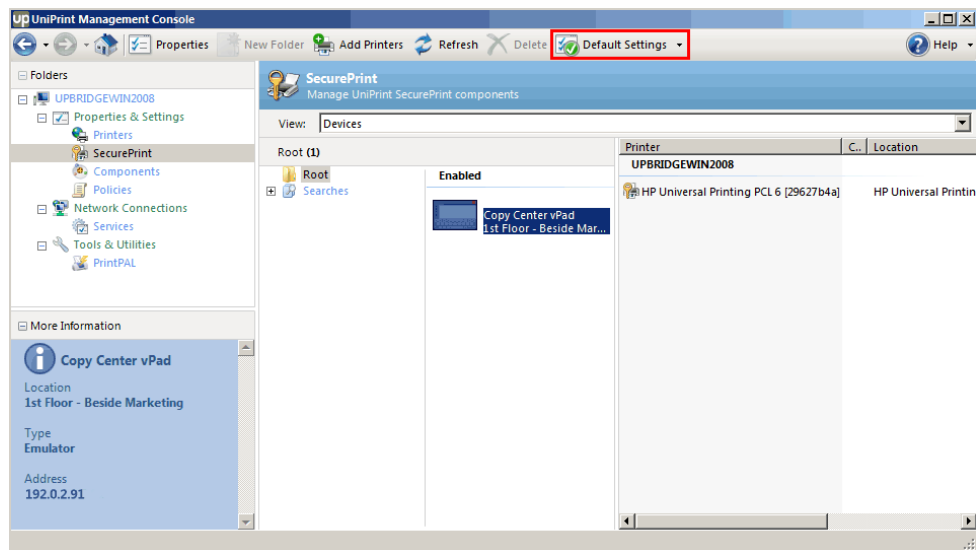
To edit settings for all vPad devices in your environment, do the following:

1. From a UniPrint component, open the **UniPrint Management Console**.

2. Under **Properties & Settings**, click **SecurePrint**.

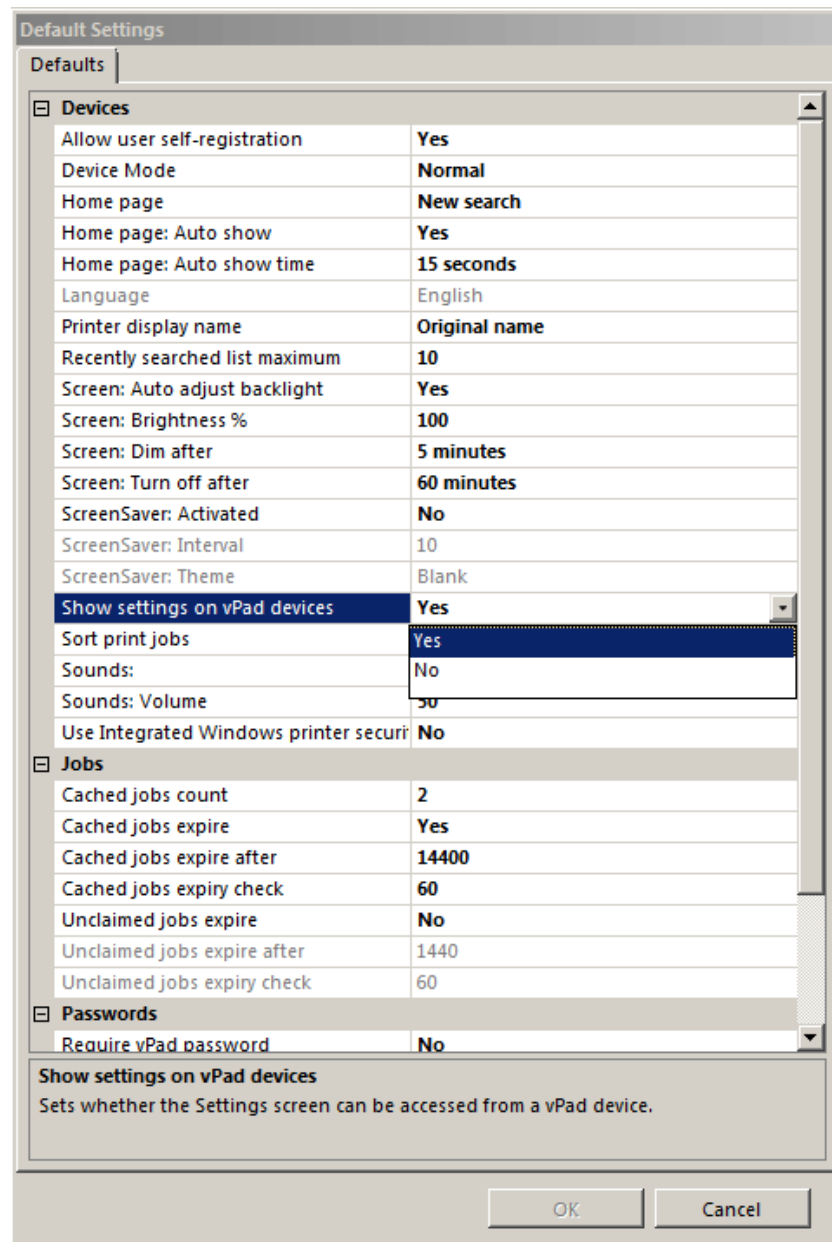


3. Click **Default Settings**.



4. Click to select the setting that you want to change and then select from the available parameter list. For example, to hide the **Settings**

screen on the vPad, click to select **Show settings on vPad devices** and then select **No**.



5. Continue to change settings, referring to the table below and then click **OK** when done.

Setting	Description
Allow user self-registration	If set to Yes , after the user submits a print job with a password, the user can then register their contactless proximity smart card or a contact smart card with a magnetic strip through the vPad device in order to associate their user name to their smart card.
Device Mode	Sets how users can retrieve print jobs from the vPad device. The options are Normal and Locked down. If set to Locked down , the device will be unresponsive to touch until a valid smart card or magnetic strip is used.
Home page	If set to NewSearch , users will be required to enter their user name in order to display their print jobs. If set to RecentUserList , users can scroll and select from a list of users who recently sent a print job, but have not retrieved it. NewSearch is the default Home page.
Home page: Auto show	If set to Yes , the default Home page will be displayed after a period of inactivity.
Home page: Auto show time	Sets the amount of time the vPad needs to be inactive before the screen changes to the default Home page. Available options are 15 seconds, 30 seconds, 1 minute, 2 minutes, and 5 minutes.
Language	English, French, Italian, and Polish interfaces are now available.
Printer display name	Sets how printer names are displayed on the vPad. Available options are Original name and UniPrint Gateway name.
Recently searched list maximum	Sets the maximum number of user names displayed in the recently searched list.
Screen: Auto adjust backlight	If set to Yes , the screen will dim and then turn off automatically after a set amount of inactive time.

Setting	Description
Screen: Brightness %	Sets the percentage of brightness. The default is 100%.
Screen: Dim after	The vPad screen will dim, if it is inactive for the amount of time set here. Available options are 30 seconds, 1 minute, 2 minutes, 5 minutes, 10 minutes and 20 minutes.
Screen: Turn off after	The vPad screen will turn off, if it is inactive for the amount of time set here. Available options are 5, 10, 15, 20, 30, and 60 minutes.
ScreenSaver: Activated	If set to Yes , a screensaver will run on the vPad after a period of inactivity.
ScreenSaver: Interval	A screensaver will activate, if the vPad is inactive for the amount of time set here in seconds.
ScreenSaver: Theme	The theme can either be set Blank in which the screen turns off or to Fading where the UniPrint logo floats in different directions on the screen.
Server Connection: Static address:port	The static IP address and port number for the print server to which the vPad is connected can be added. Note: <i>The static IP address can only be set at the physical device.</i>
Show settings on vPad devices	If set to Yes , the Settings icon and screen will be available on the vPad device and any user can change its settings.
Sort print jobs	Print jobs can either be displayed with the oldest first or the newest first.
Sounds	Tap sounds can be enabled or disabled.
Sounds: Volume	The volume can be set between 0 and 100%. The default is 50%.
Use Integrated Windows printer security	If set to Yes , SecurePrint will check Group Policies and display only the printers to which the user has access.
Cached jobs count	Sets the number of print jobs per user to keep cached in history. Default is 2.

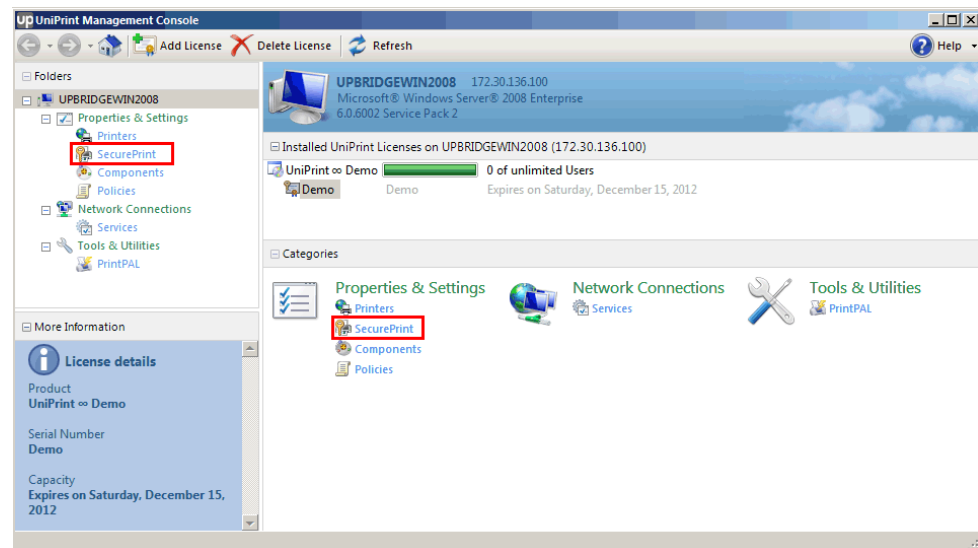
Setting	Description
Cached jobs expire	Sets whether cached jobs expire. If set to Yes , cached jobs will expire after the time set in Cached jobs expire after . If set to No , cached jobs never expire and will remain in the cached history until they are manually removed. Default is Yes .
Cached jobs expire after	Sets how long (in minutes) cached jobs are kept. Default is 14400 minutes (10 days).
Cached jobs expiry check	Sets how frequently (in minutes) the system checks for expired cached jobs. Default is 60 minutes.
Unclaimed jobs expire	Sets whether unclaimed jobs expire. If set to Yes , unclaimed jobs will be deleted after the time set in Unclaimed jobs expire after . If set to No , unclaimed jobs never expire and will remain in queue until they are manually deleted. Default is No .
Unclaimed jobs expire after	Sets how long (in minutes) unclaimed jobs are kept. Default is 1440 minutes. (24 hours).
Unclaimed jobs expiry check	Sets how frequently (in minutes) the system checks for unclaimed jobs. Default is 60 minutes.
Require vPad password	If set to Yes , the user will be required to set and enter a password in order to release their print job.
Require VPQ password	If set to Yes , whenever the user prints to the UniPrint VPQ (virtual print queue), the user will be required to set and enter a password in order to release their print job.
Allow password bypass at device	This is for valid smart card, RFID or HID users. If set to Yes , only the smart card, RFID or HID is required for authentication and release of print jobs. If set to No , using the smart card, RFID or HID will only display the user's list of print jobs. However, the user will still be required to enter a password in order to release a print job.

Setting	Description
User card limit	Sets the number of contactless/contact smart cards that can be associated to each user name.

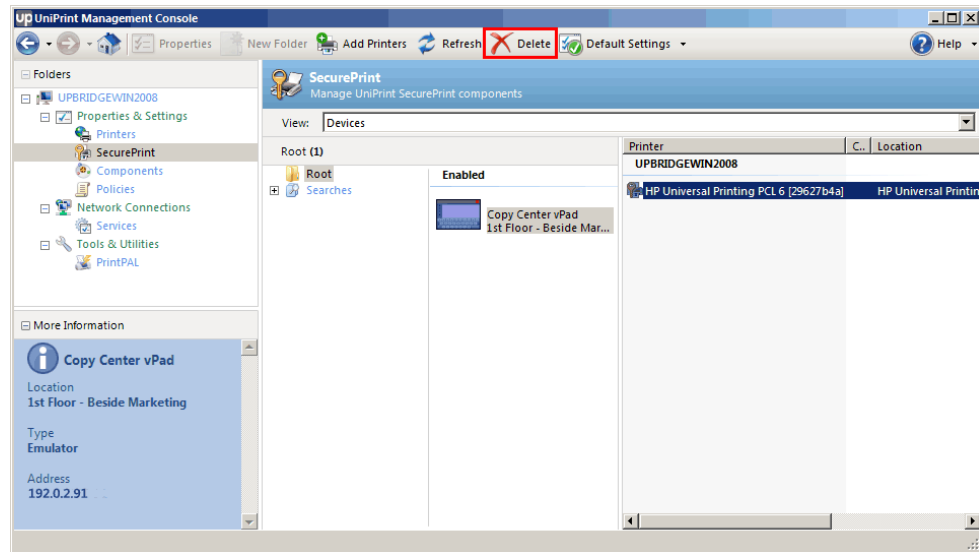
Deleting a Printer from a vPad

To delete a printer from a vPad, do the following:

1. From a UniPrint component, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **SecurePrint**.



3. Click to select a printer to delete and then click **Delete**.



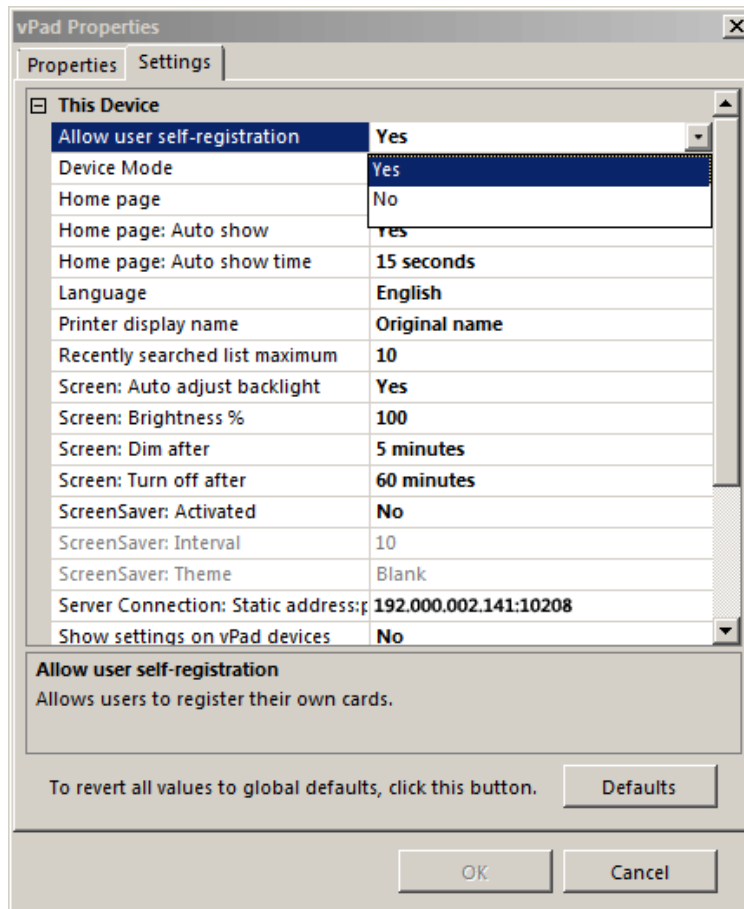
4. Click **Yes** to confirm that you want to delete this printer.

Associating A Smart Card With A User Name

Before a user can associate their smart card directly at the vPad, the network administrator must first enable this functionality on the UniPrint Management Console.

1. On a UniPrint component, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **SecurePrint**.
3. Click to select an individual vPad and then click **Properties**.

- Set **Allow user self-registration** to **Yes**.



Users can register their smart card at the vPad, by doing the following:

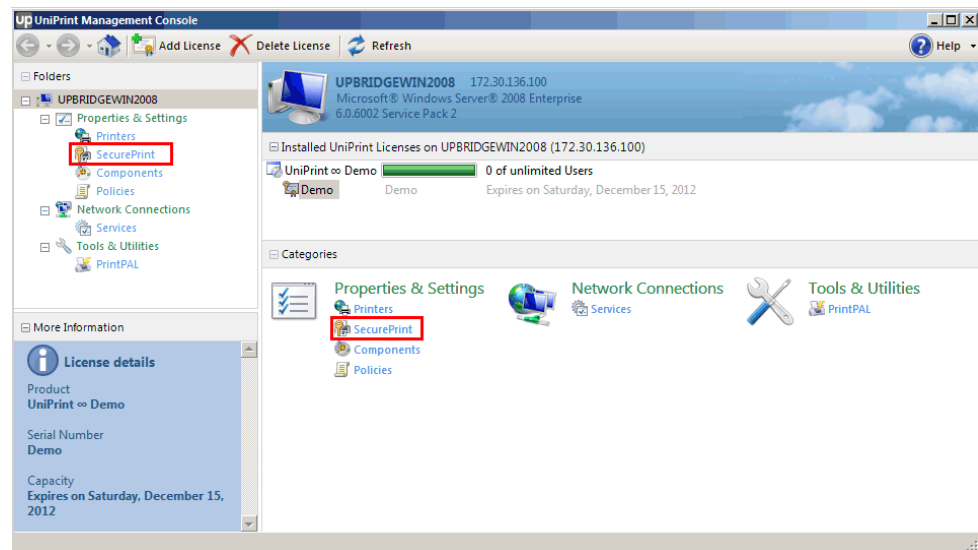
- Print a document to a UniPrint Gateway printer or UniPrint VPQ with SecurePrint password enabled. See ["Setting up your SecurePrint Password" on page 230](#).
- At the vPad, swipe, wave or tap the user's smart card.
- A message will appear informing you that the smart card is not yet associated with a user name. To continue and associate the card with the user name, click **OK**.
- Search and then select a user name.
- Enter the SecurePrint password set in step 1 and then click **OK**. The smart card is now associated with the user name and the print job can now be released.

Importing A List Of Users and Smart Cards Into SecurePrint

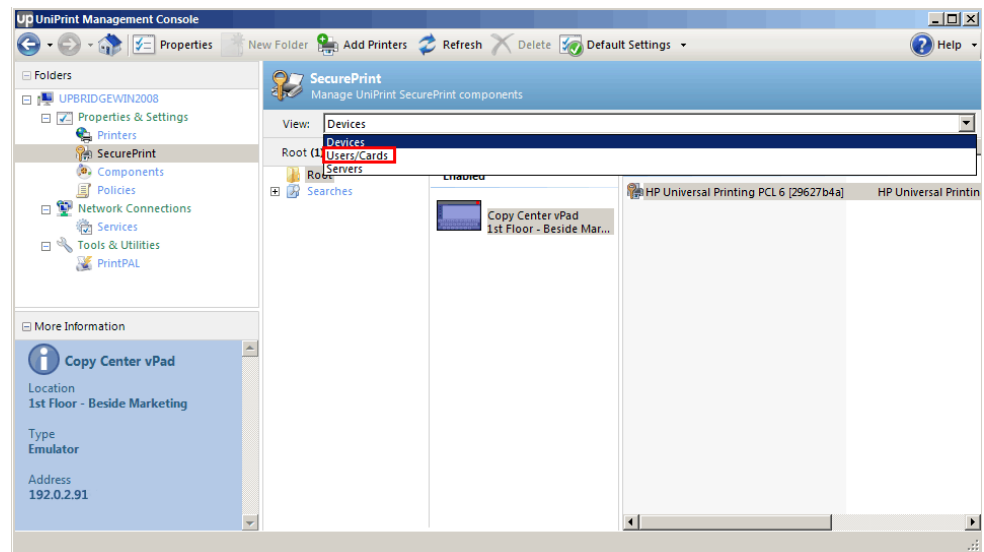
An alternative to having your users register their smart cards individually on each vPad, is to import a list of users. To do this, a user and card number list must first be created. The list must have the user name, domain and card ID number which can either be delimited with commas, spaces, semi-colons or tabs and be saved as a text (.txt) file. The domain can be omitted, if all of your users belong to the same domain.

After creating your user list, follow these steps to import the data into SecurePrint:

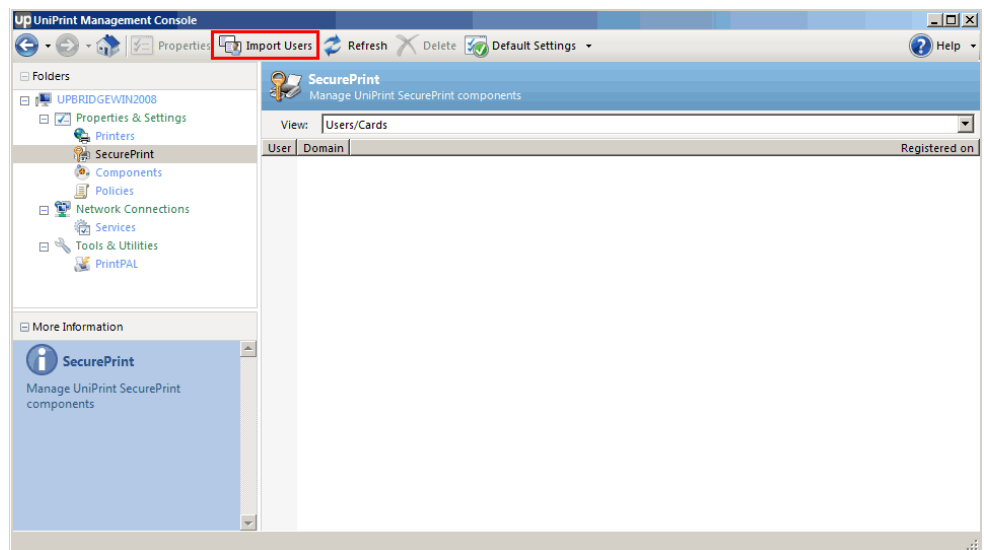
1. From a UniPrint component, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **SecurePrint**.



3. From the **View** list, select **Users/Cards**.

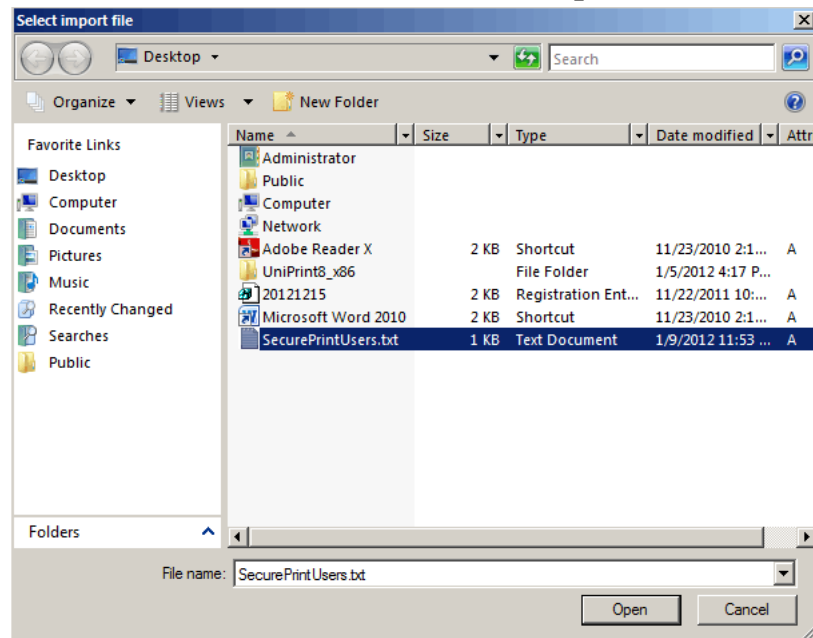


4. Click **Import Users**.



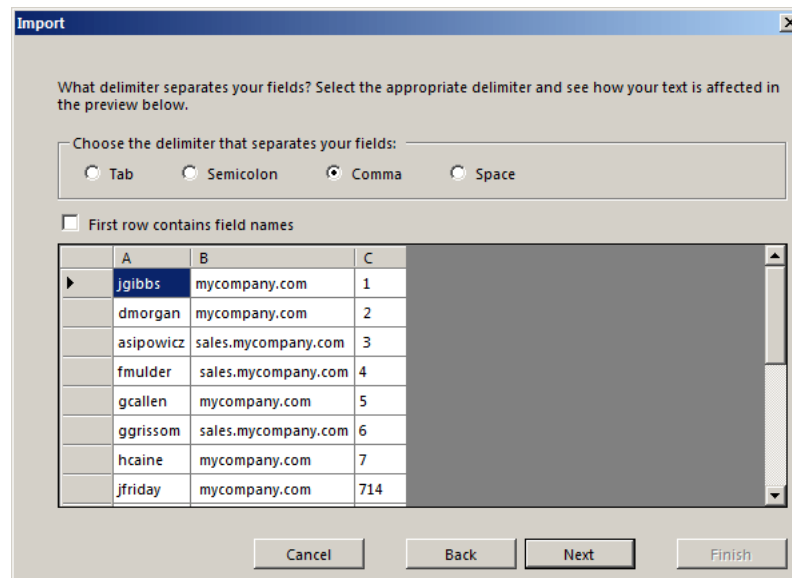
5. Click **Browse** to locate the user list that you created.

6. Click to select the user list and then click **Open**.



7. Click **Next**.

8. Select the type of delimiter used in the file and then click **Next**.



9. Map the appropriate columns to the data and then click **Next**.

The fields below are mandatory and must be mapped. Select the appropriate column from your data file to map to a field.

User Domain: B
User ID: A
Card ID: C

	A	B	C
▶	jgibbs	mycompany.com	1
	dmorgan	mycompany.com	2
	asipowicz	sales.mycompany.com	3
	fmulder	sales.mycompany.com	4
	gcallen	mycompany.com	5
	ggrissom	sales.mycompany.com	6
	hcaine	mycompany.com	7

Buttons: Cancel, Back, Next, Finish

- a) If no domain is specified, select **Constant** and then enter the domain.

The fields below are mandatory and must be mapped. Select the appropriate column from your data file to map to a field.

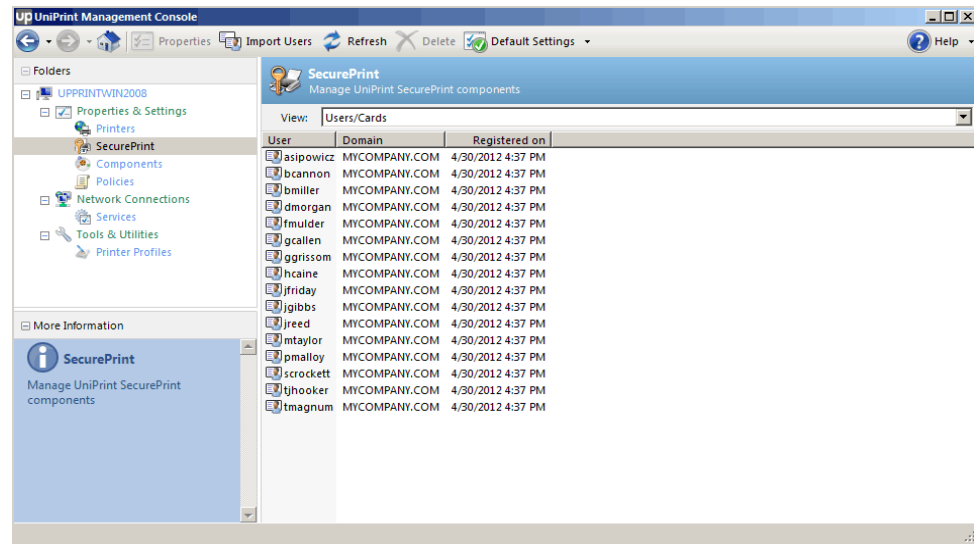
User Domain: Constant * mycompany.com
User ID: A
Card ID: B

	A	B
▶	jgibbs	1
	dmorgan	2
	asipowicz	3
	fmulder	4
	gcallen	5
	ggrissom	6
	hcaine	7

Buttons: Cancel, Back, Next, Finish

10. Click **Next** and then click **Finish**.

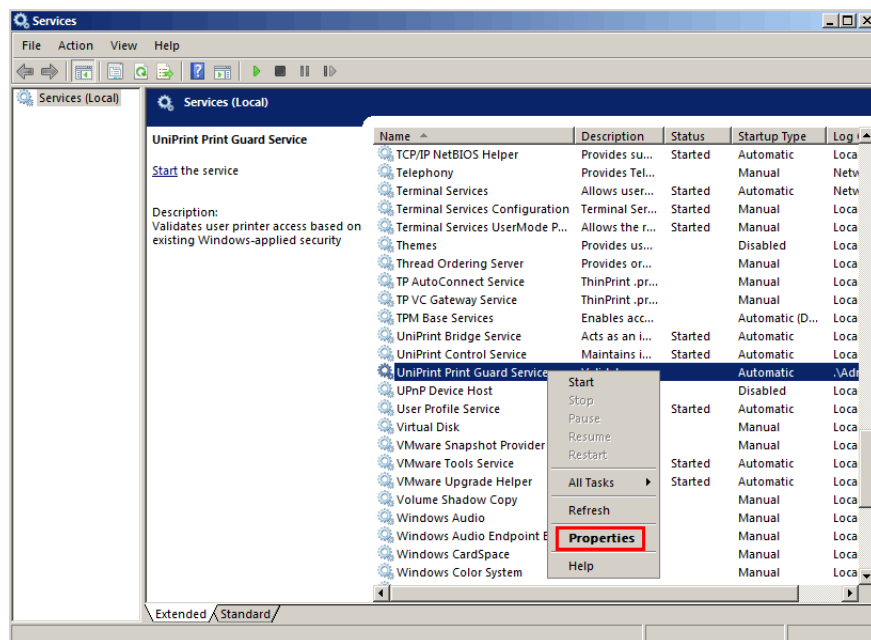
The imported user and card information will appear on the console.



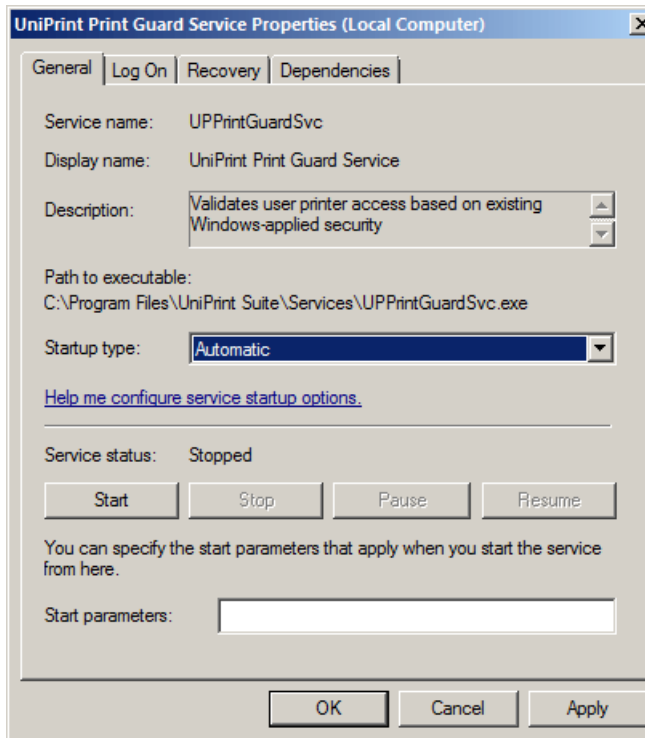
Limiting The Number Of Printers Viewed On The vPad

After a user prints and goes to the vPad, they could be presented with an ominous list of printers that are available in your domain. To limit the number of printers that are presented to the user on the vPad, do the following:

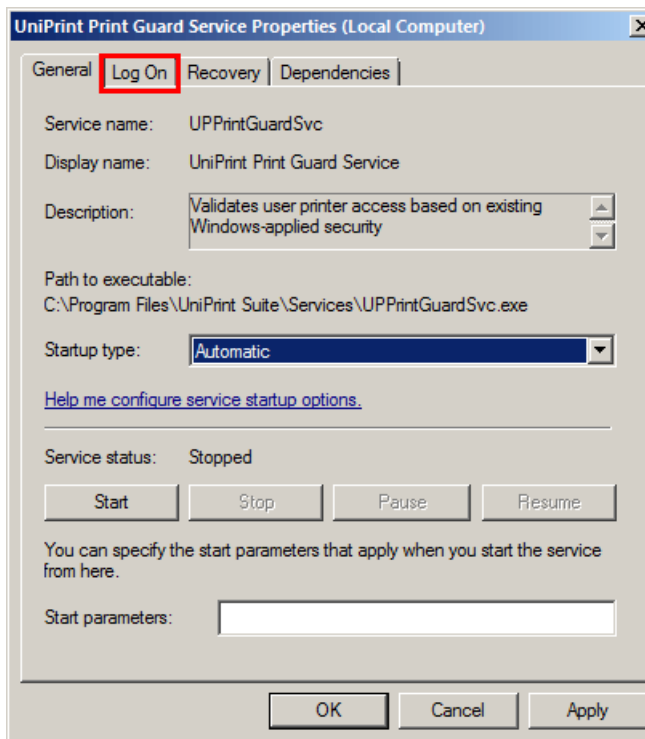
1. On the SecurePrint Server (UniPrint Bridge), click **Start**, point to **Administrative Tools** and then click **Services**.
2. Right-click **UniPrint Print Guard Service** and then select **Properties**.



- From the **Startup type** list, select **Automatic**.

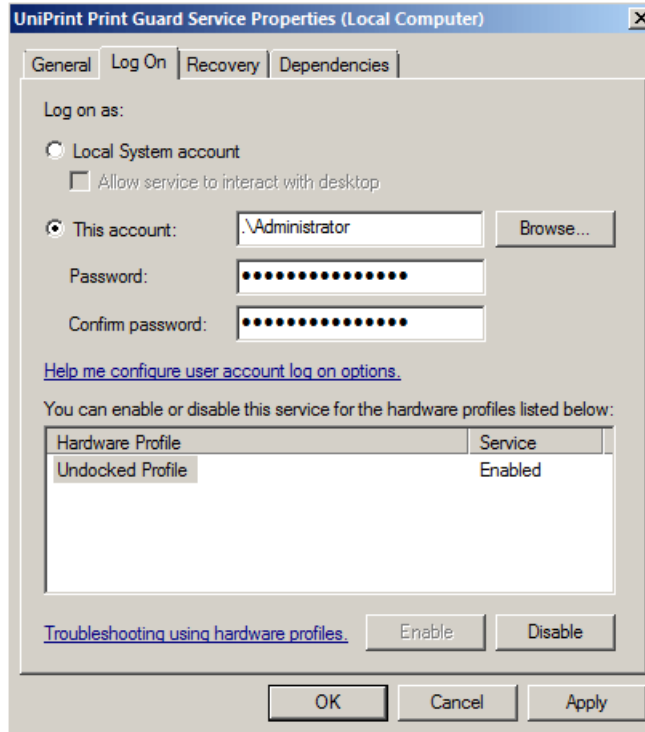


- Click the **Log On** tab.

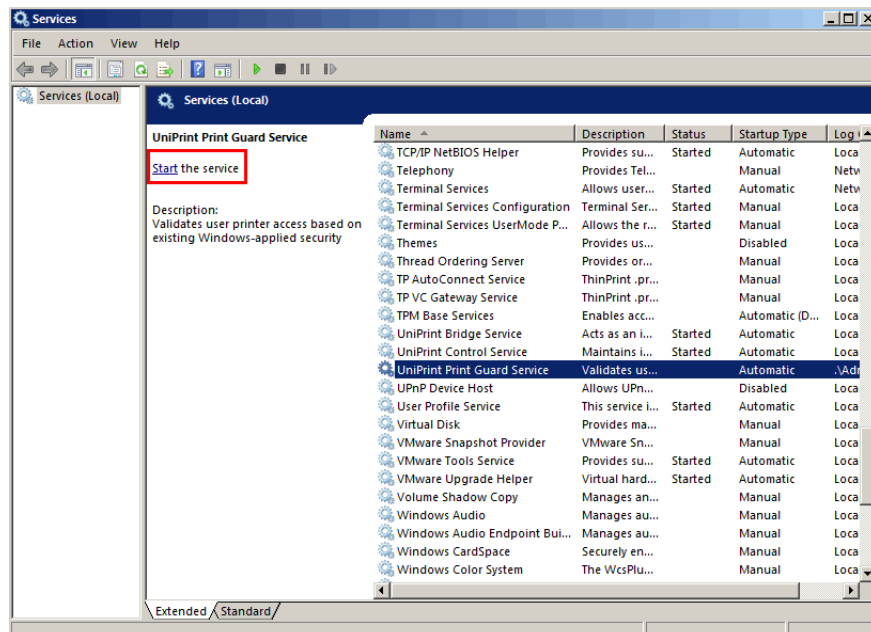


- Select **This account** and enter either domain administrator or domain user credentials and then click **OK**. *Note: The Print Guard*

Service needs to run as either a domain administrator or domain user with local administrator rights on the SecurePrint Server (UniPrint Bridge).

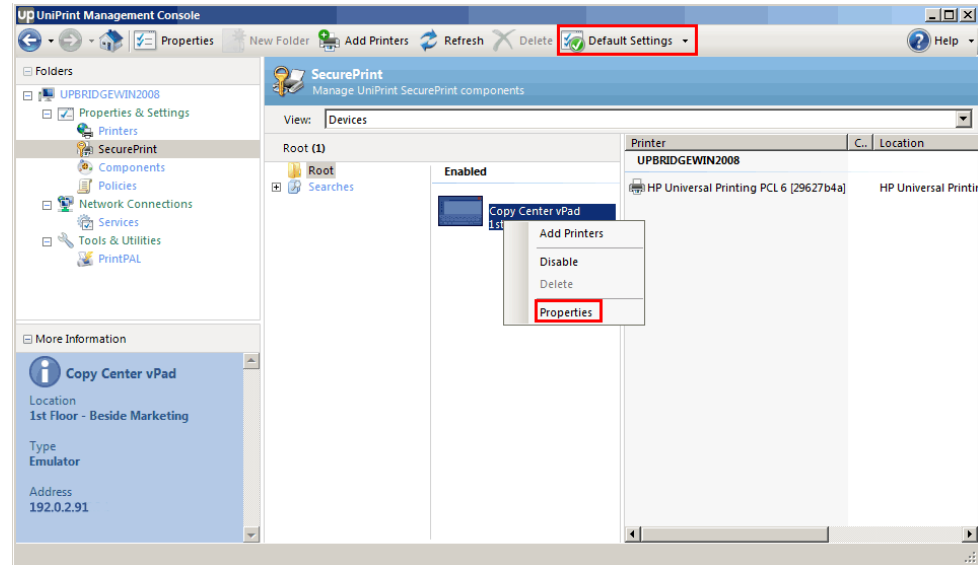


6. Start **UniPrint Print Guard Service**.

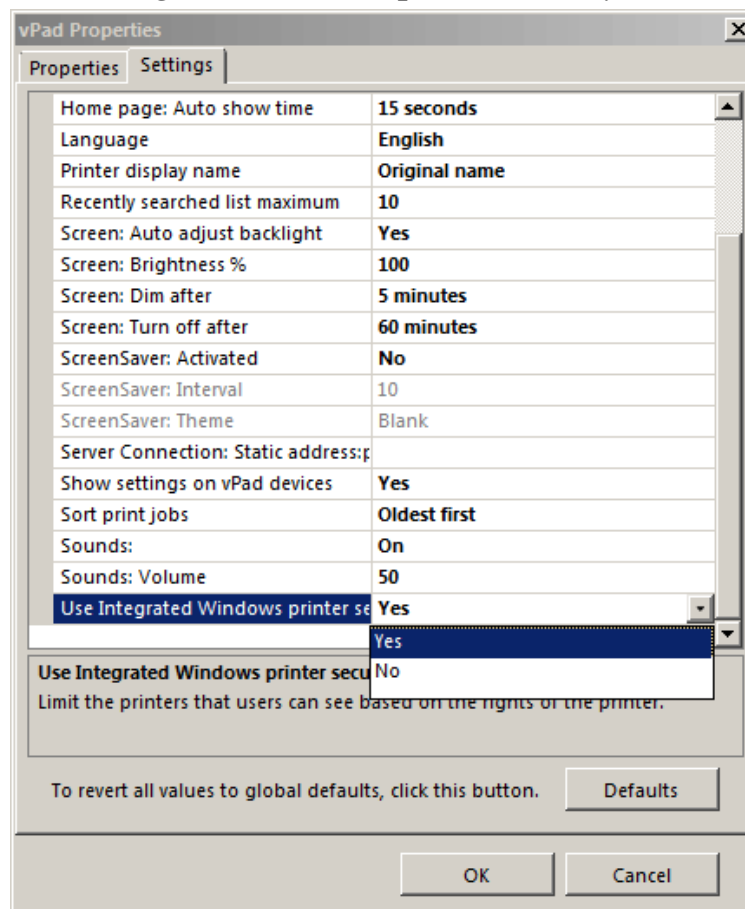


7. Open the **UniPrint Management Console** and then click **SecurePrint**.

8. Either right-click a vPad to change an individual device or click **Default Settings** to change global vPad properties.



9. Click the **Settings** tab.
10. Set **Use Integrated Windows printer security** to **Yes**.



11. Click **OK**.
12. Deny printer access by modifying the ACL of Gateway printer located on the UniPrint Bridge.

Configuring The UniPrint vPad Device

vPad is a device that was designed in conjunction with SecurePrint and the VPQ (virtual print queue). vPad securely controls access to stored print jobs and is printer model independent. Since more than one printer can be associated with a vPad device, only one vPad is required for a group of printers located in close proximity of each other.

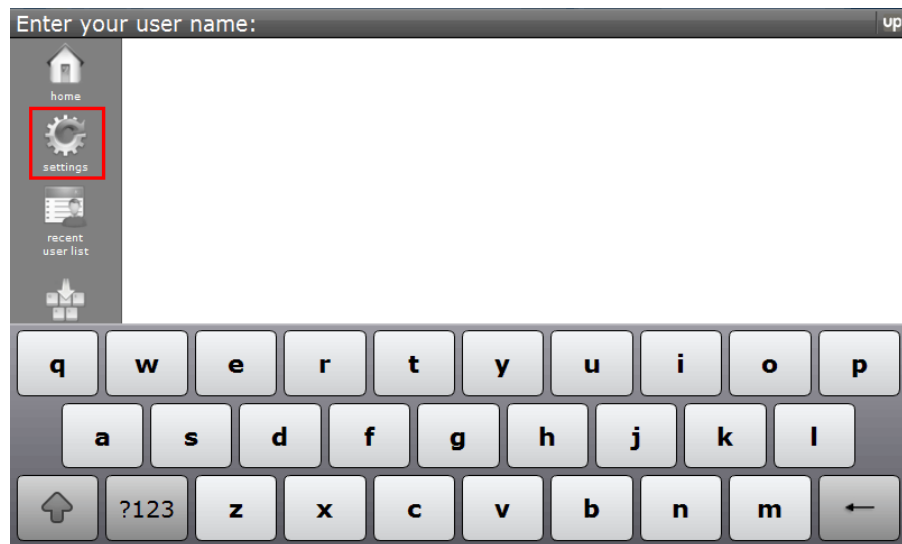
Configuring the process of secure pull-printing is done on the UniPrint Management Console, however the device itself can be configured to reduce memory consumption and adjust screen brightness for example.

The following tasks can only be done if the administrator has enabled **Show settings on vPad devices** on the SecurePrint Server (UniPrint Bridge).

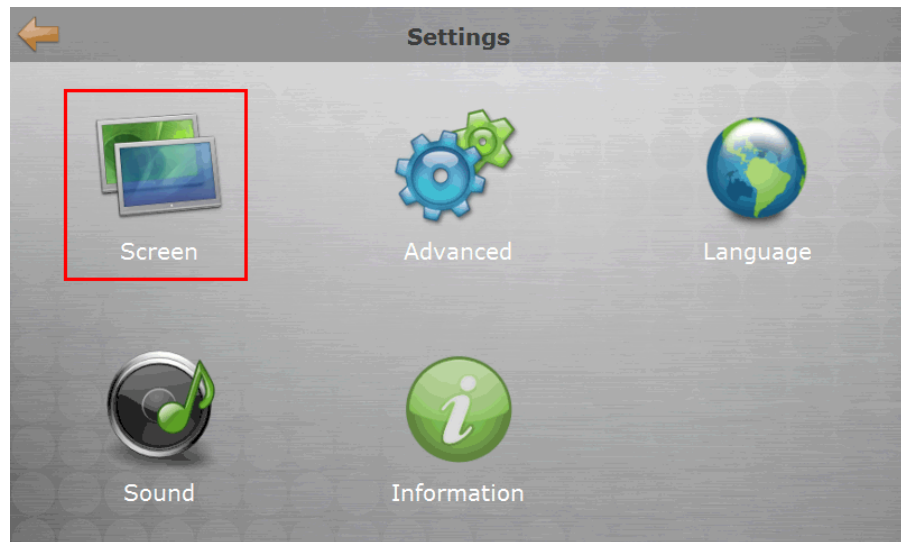
Adjusting Screen Brightness and Backlighting

To adjust the screen brightness and backlighting, do the following:

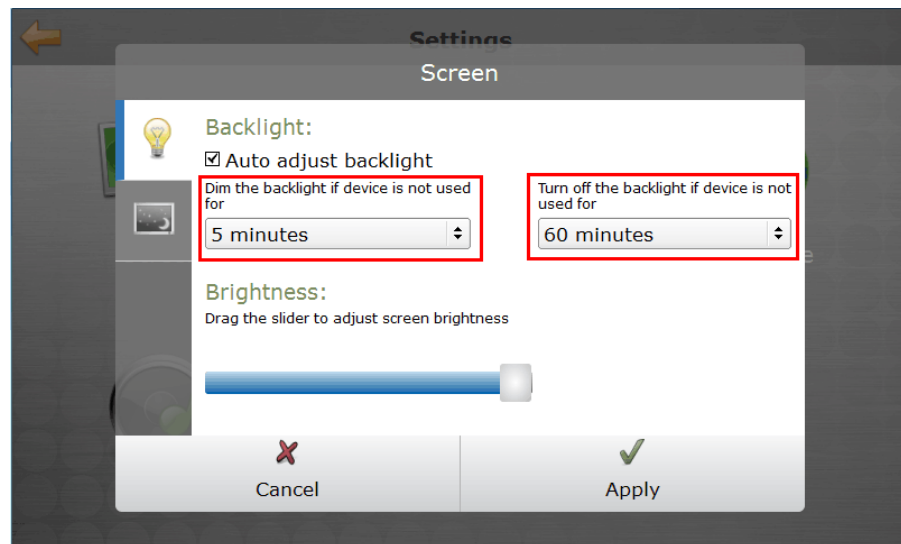
1. In the Home page, tap **Settings**.



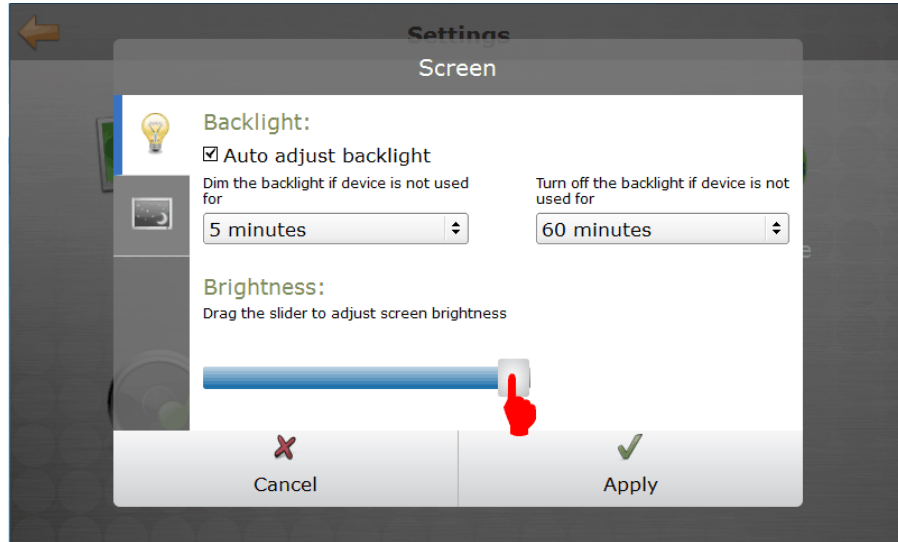
2. Tap **Screen**.



3. Adjust screen idle time when you would like the backlight to dim and turn off by selecting the appropriate time from the lists.



4. Adjust the screen brightness by dragging the slider to appropriate level.

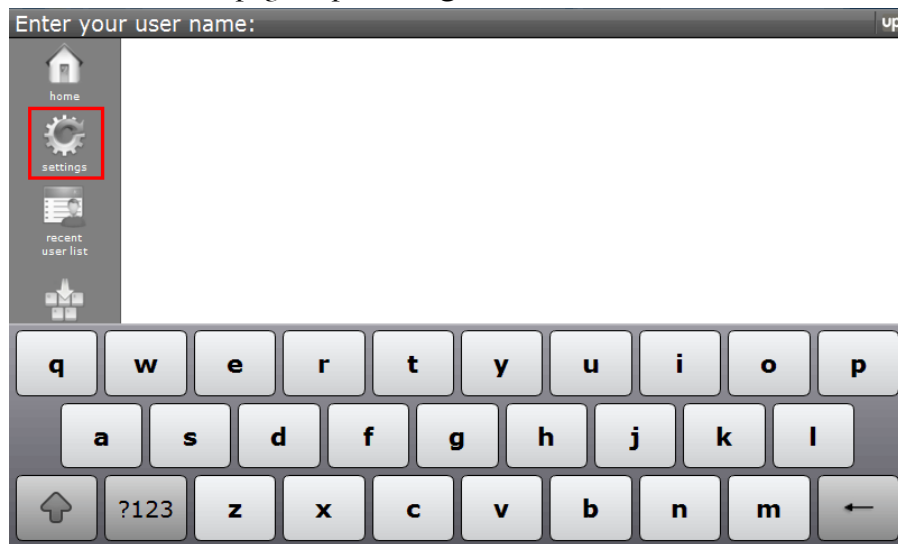


5. Tap **Apply**.

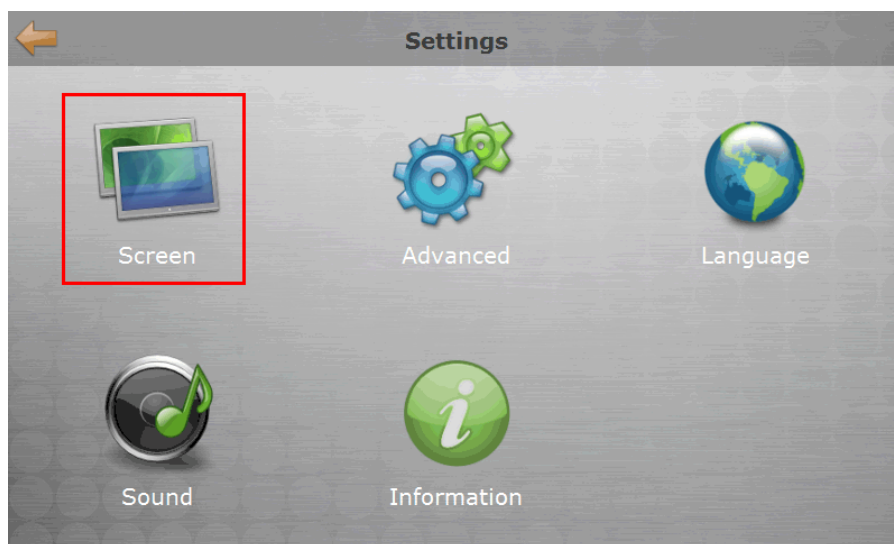
Setting Up A Screensaver

To set up a screensaver on the vPad, do the following:

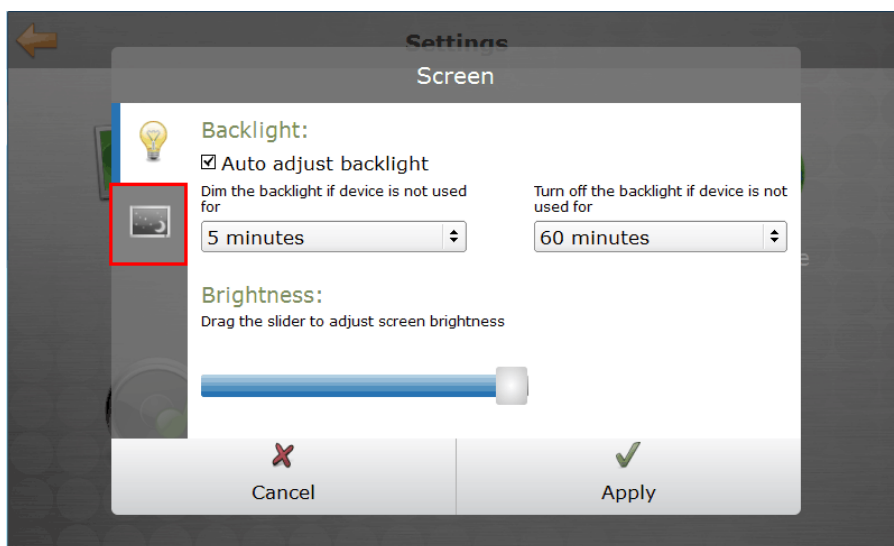
1. In the Home page, tap **Settings**.



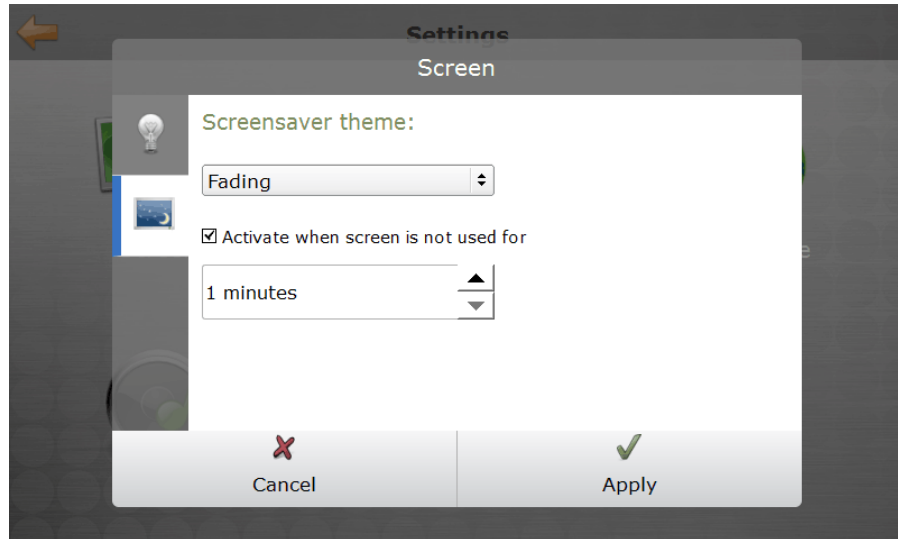
2. Tap **Screen**.



3. Tap the **Screensaver** tab.



4. Select the theme, **Fading** or **Blank** and the screen idle time required before the screensaver starts. To disable the screensaver, clear the **Activate when screen is not used for** option.



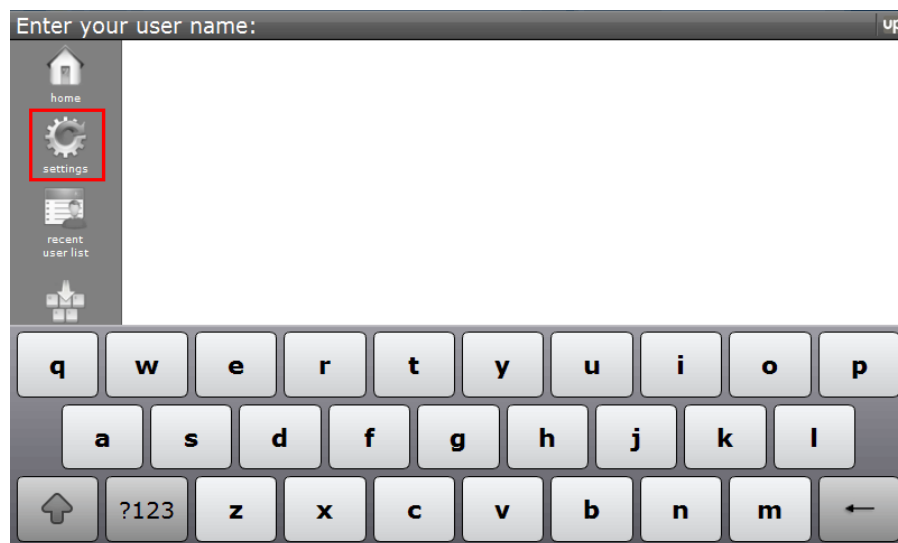
5. Tap **Apply**.

Changing the Default Home Page & Refresh To Home Page

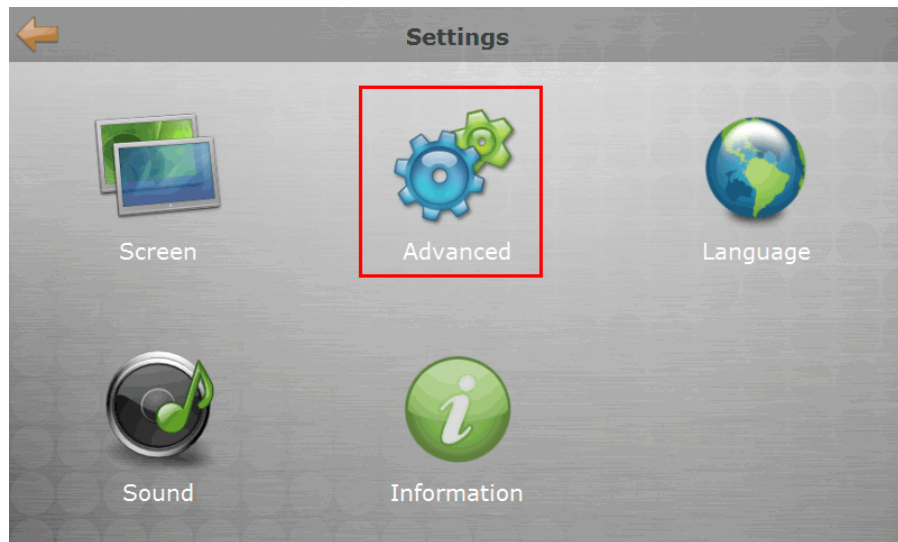
Depending on your users' preference, the home page can be set to either immediately accept their user input or to a list of recent users. The time in which the screen refreshes to the home page if left idle can also be adjusted.

To change the Home page settings, do the following:

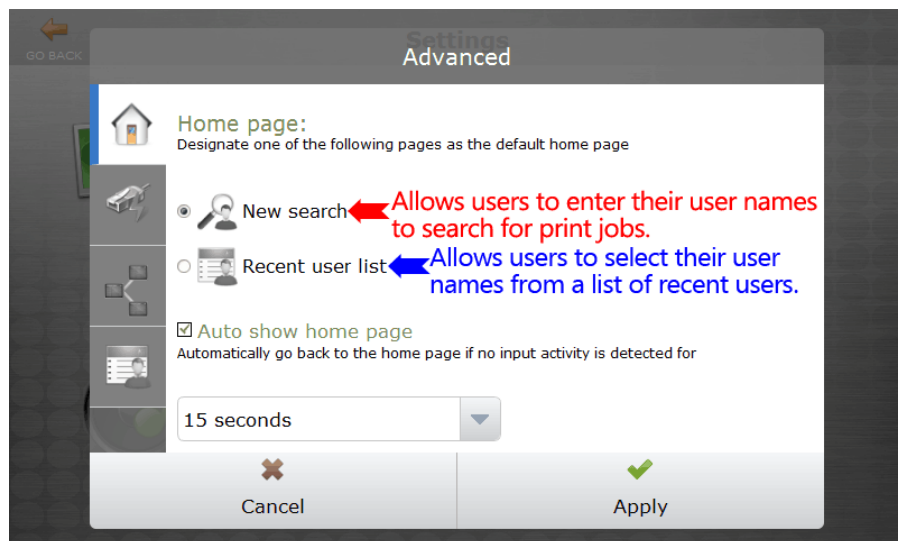
1. In the Home page, tap **Settings**.



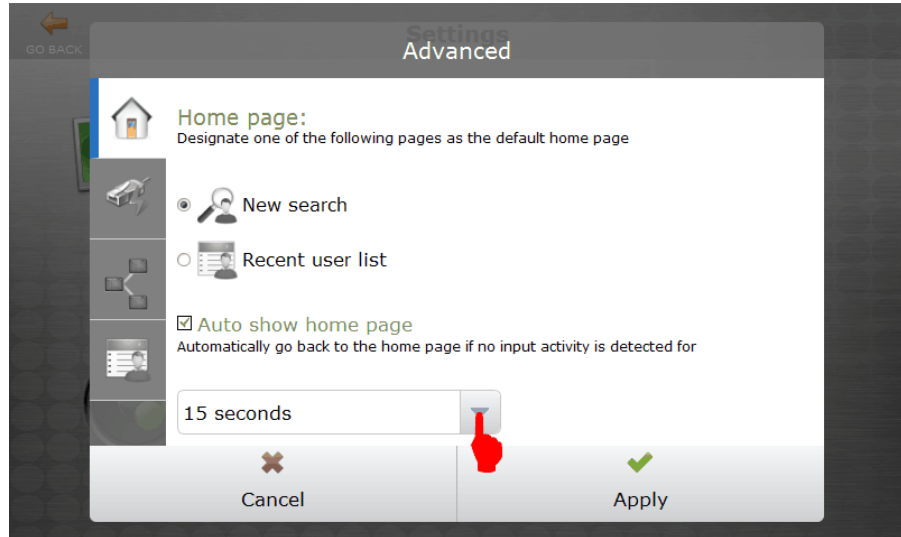
2. Tap **Advanced**.



3. Tap either **New search** or **Recent user list**.



4. Tap to select the screen idle time required before it refreshes to the home page.



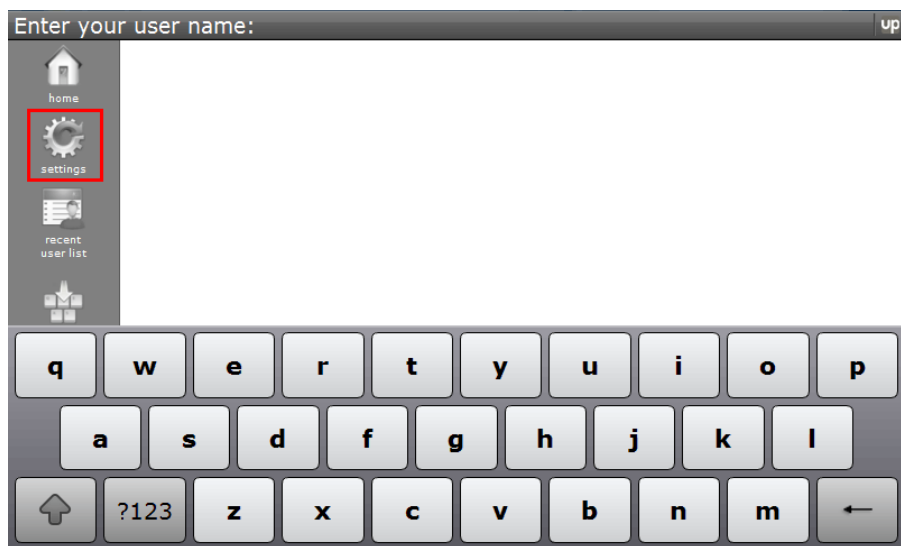
5. Tap **Apply**.

Changing Print Server Connection Information

Although vPad auto-detects the closest UniPrint Print Server, it may still detect the incorrect server in a multiple UniPrint Print Server environment.

To change the Print Server connection IP address and port number, do the following:

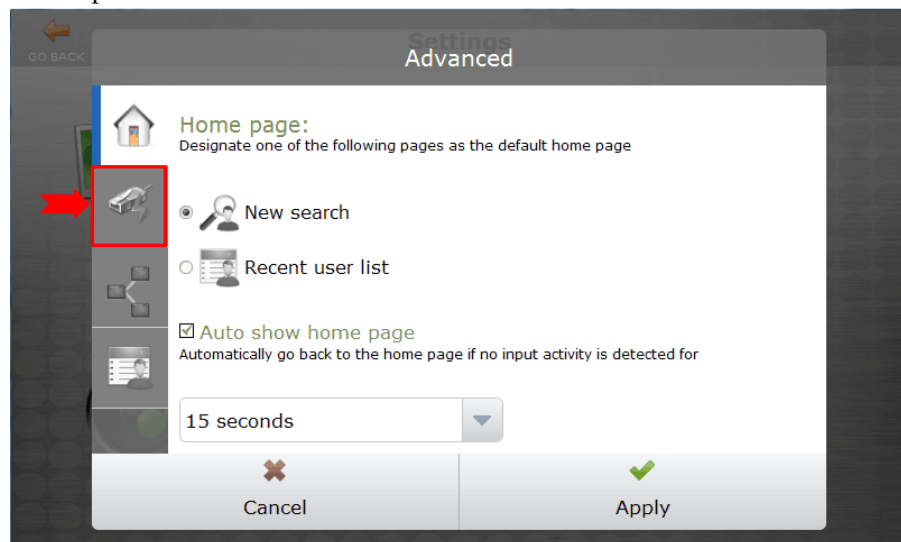
1. In the Home page, tap **Settings**.



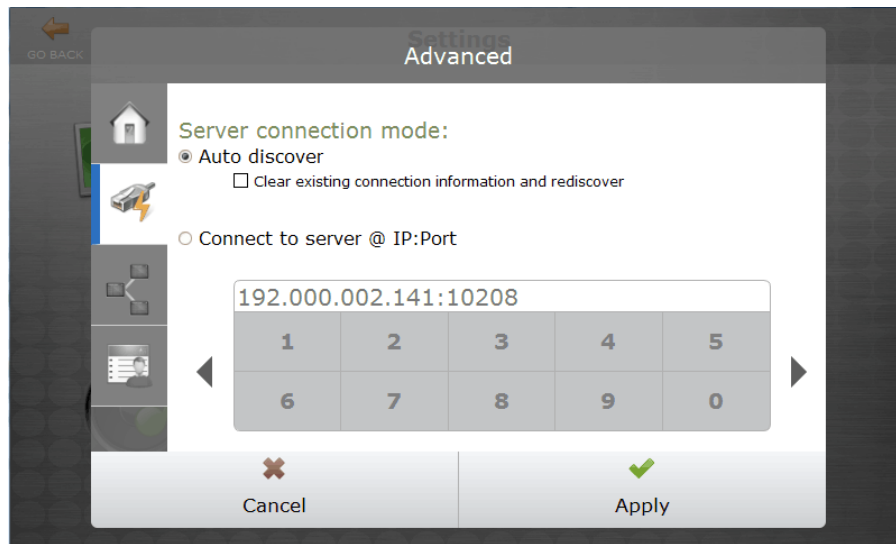
2. Tap **Advanced**.



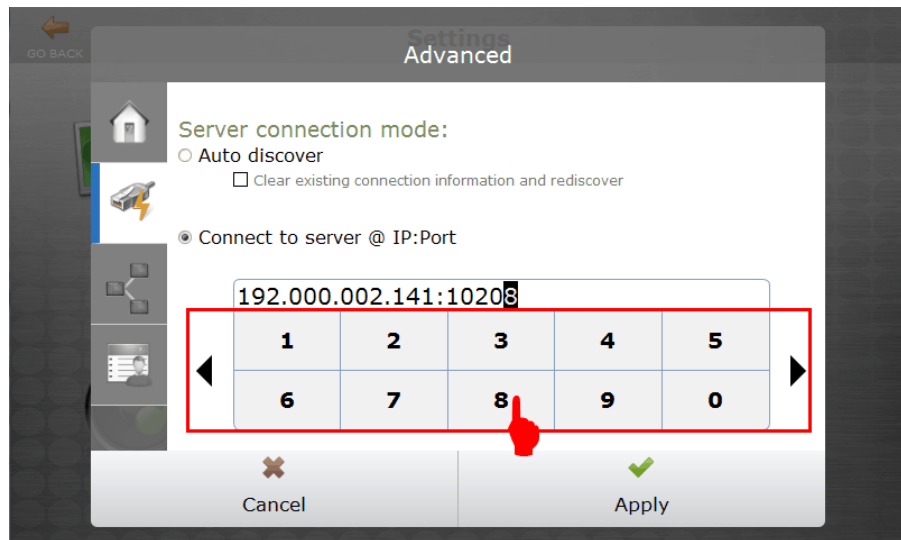
3. Tap the **Network** tab.



4. Tap either **Auto discover** or **Connect to server @ IP:Port**.



- a) If **Connect to server @ IP:Port** is selected, tap the arrows and numerical pad to enter the new IP address and port number of the UniPrint Print Server.

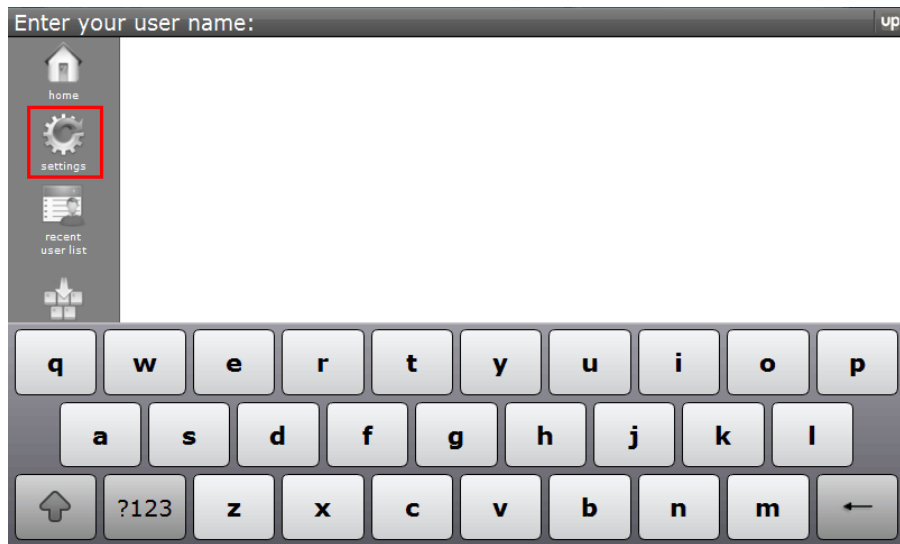


5. Tap **Apply**.

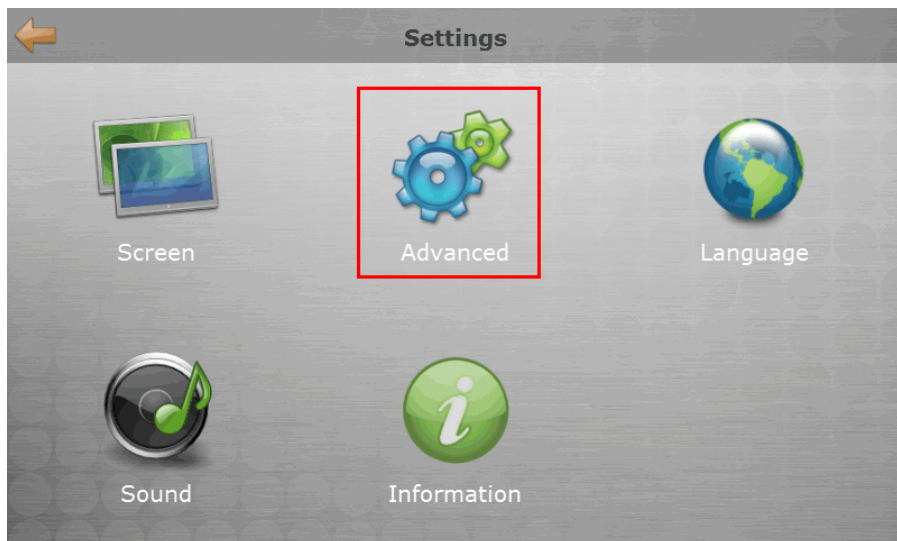
Assigning a Static IP Address To The vPad Device

A static IP address can be assigned to the vPad device. This feature does not apply to the SecurePrint emulator and the screen is therefore disabled on the emulator.

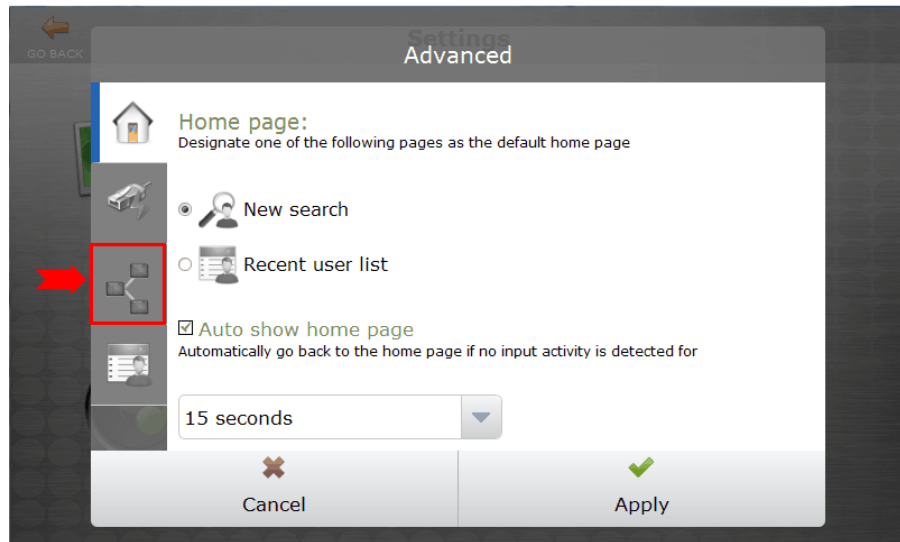
1. In the Home page, tap **Settings**.



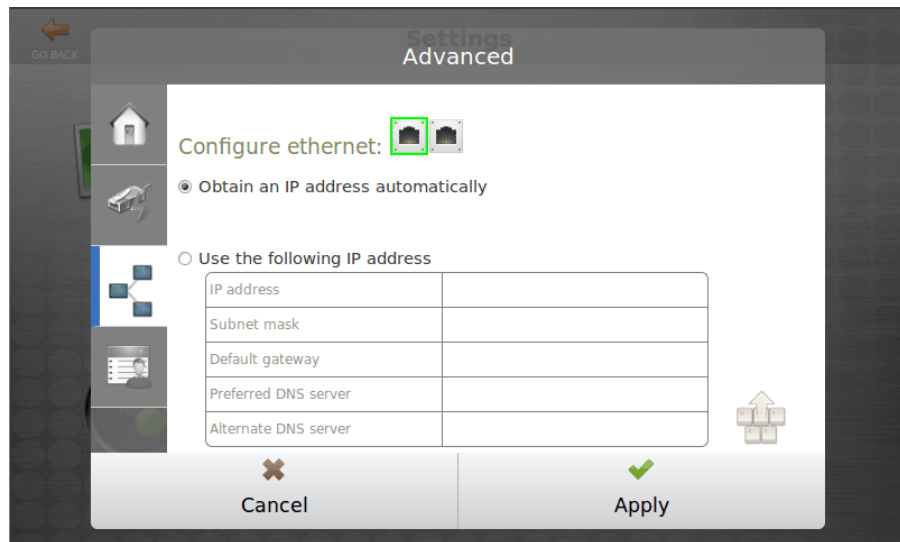
2. Tap **Advanced**.



3. Tap **Ethernet Connection** tab.

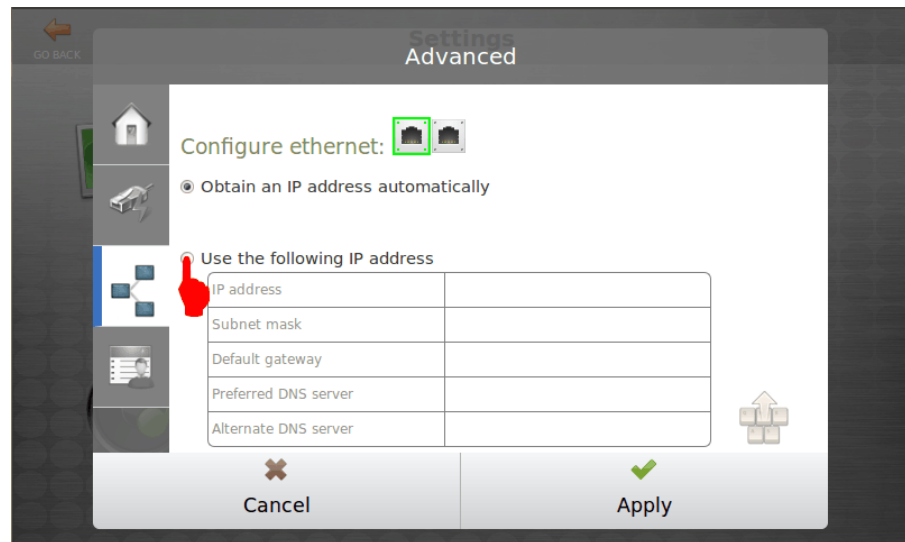


4. Ensure that the left ethernet port (highlighted in green) is used. This is the Ethernet port that is labelled eth1 and is used to connect to your network.

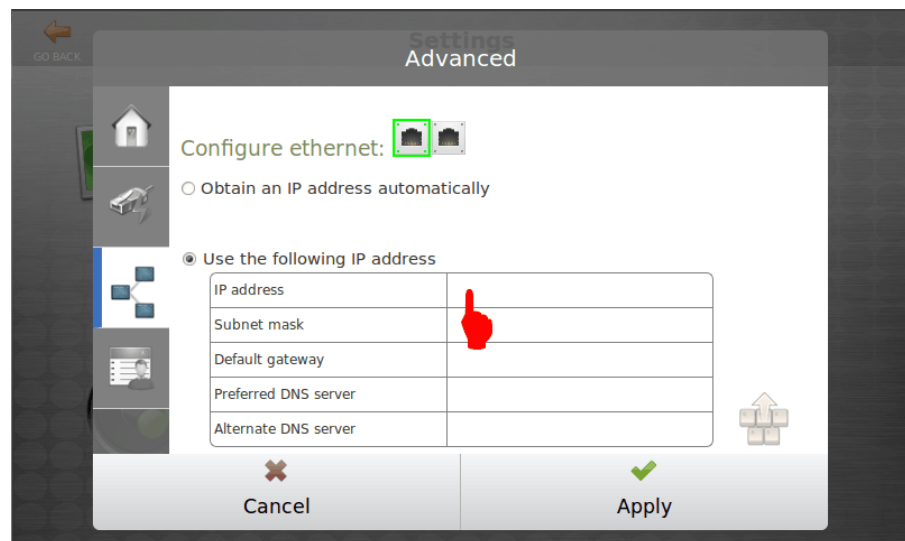


The non-green port which is labelled eth0 is used as a bridge when an additional network wall jack is unavailable for the vPad device. In this situation, disconnect the network printer from the network wall jack and connect it the vPad device on eth0. Then connect the vPad device to the network wall jack on eth1.

5. Tap **Use the following IP address**.



6. In the table, tap the empty cell beside **IP address**.



7. A keyboard will appear. Enter the IP address to be assigned to this device.

The screenshot shows the 'Settings Advanced' screen. At the top, there is a 'GO BACK' button and a 'Settings Advanced' title. Below the title, there is a section titled 'Use the following IP address' with a radio button. Under this section, there are five input fields: 'IP address', 'Subnet mask', 'Default gateway', 'Preferred DNS server', and 'Alternate DNS server'. To the right of these fields is a printer icon. At the bottom of the screen, a virtual keyboard is displayed. A red finger icon is pointing to the '1' key on the keyboard.

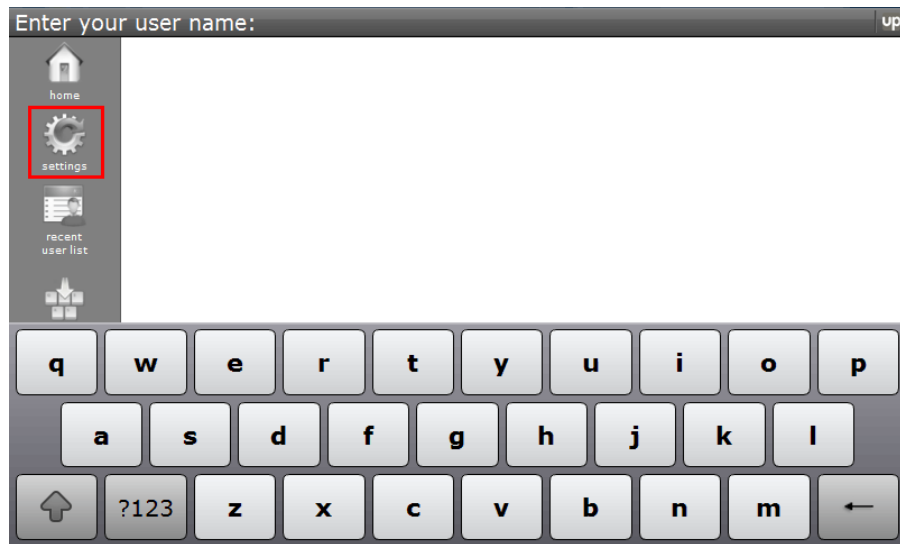
8. Tap the empty cell beside **Subnet mask** and then enter the appropriate IP address.
9. Repeat the above procedure to enter the **Default gateway**, **Preferred** and **Alternate DNS server** IP addresses.
10. Tap **Apply** when all the information is complete.

Changing the Number of Users Listed Under Recently Searched User Names

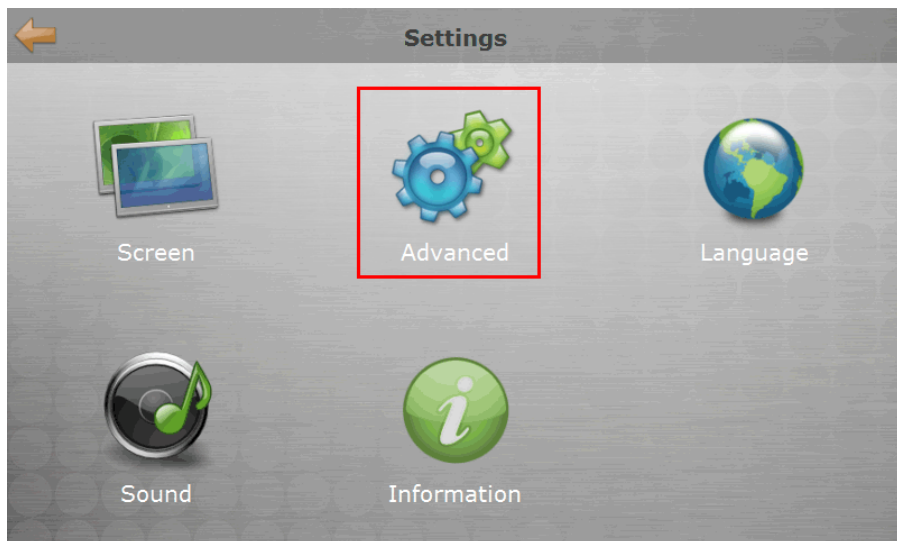
Users can also search for their user name in a list of **Recently searched users** instead of entering their user names each time. The number of users kept in this list can be adjusted to meet your users' preference.

To change the number of users on the **Recently searched users** list, do the following:

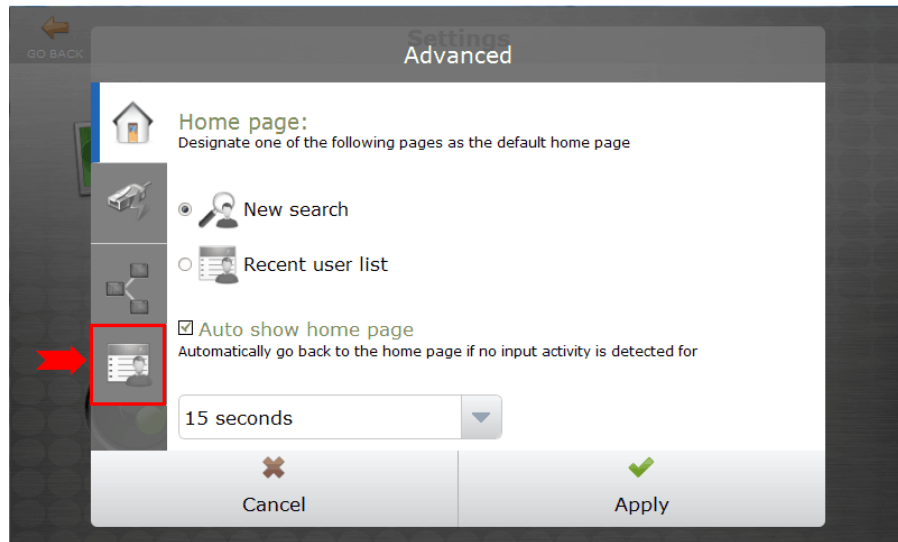
1. In the Home page, tap **Settings**.



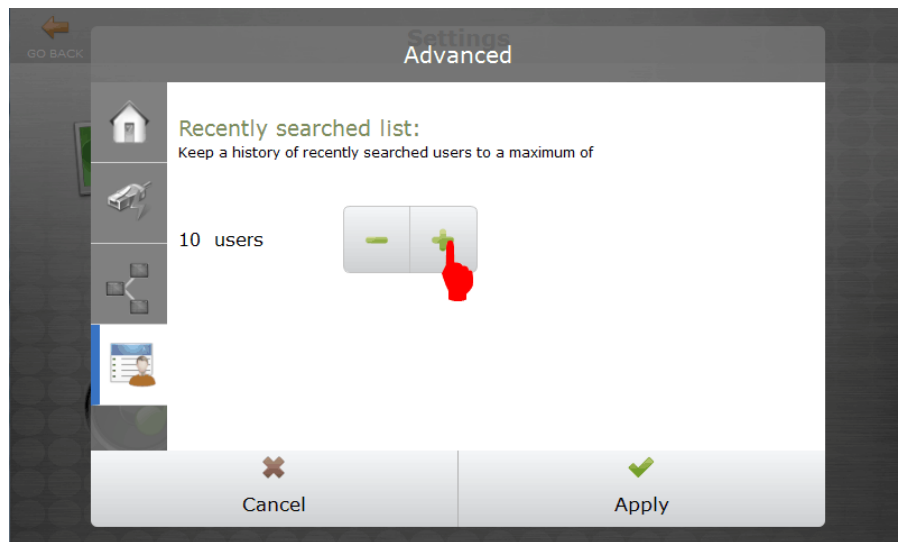
2. Tap **Advanced**.



3. Tap the **List** tab.



4. Tap the up and down arrows to adjust the number of users kept in the search list.

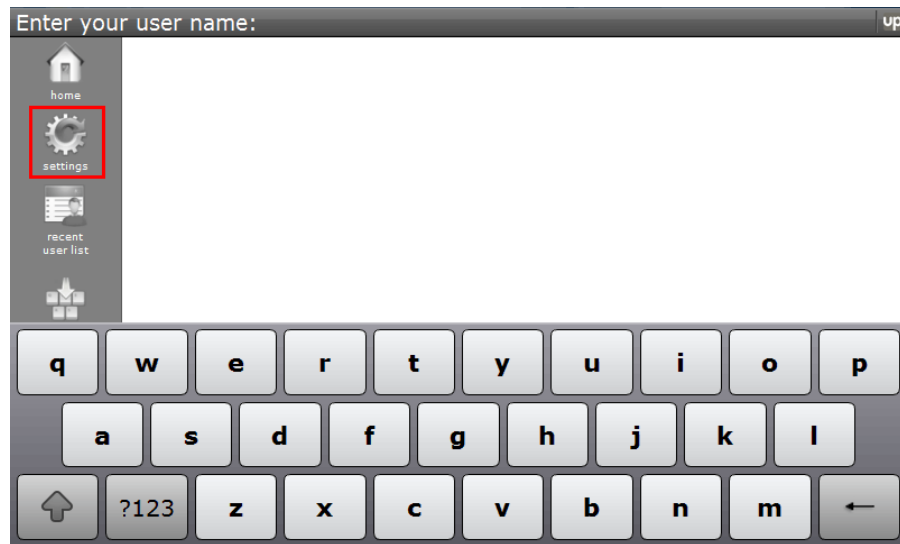


5. Tap **Apply**.

Changing the Interface Language

Currently the vPad interface supports English, French, German, Spanish, Italian, Polish and simplified Chinese. However, provisions have been made to include other languages in the vPad. To change the interface language, do the following:

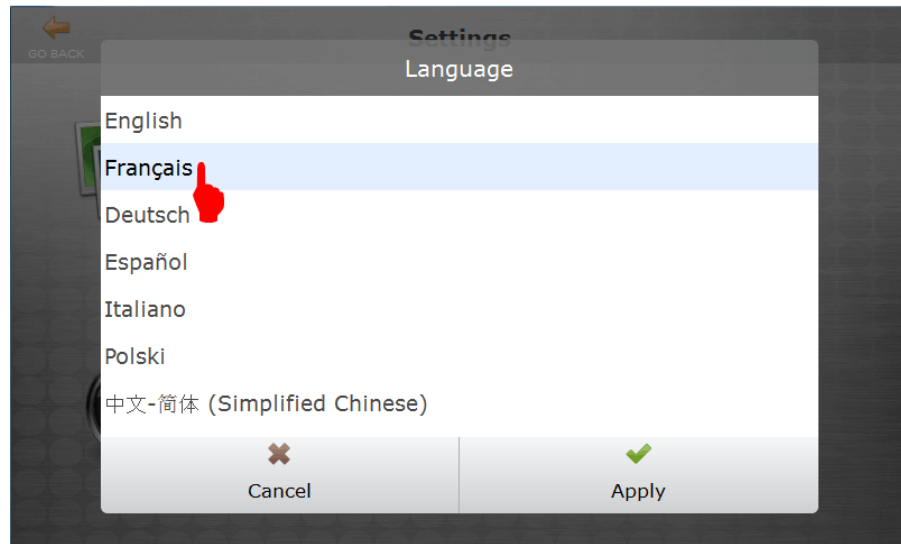
1. In the Home page, tap **Settings**.



2. Tap **Language**.



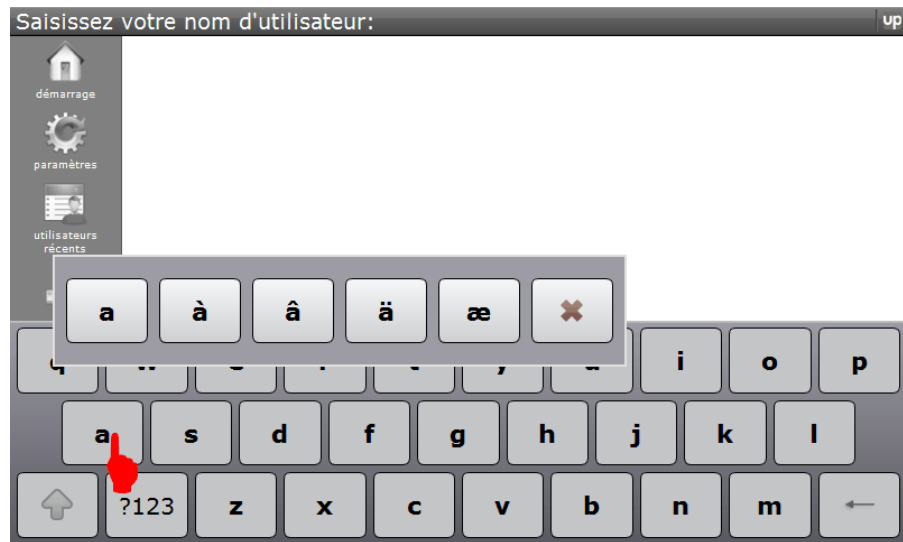
3. Tap to select a language.



4. Tap **Apply**.
5. Tap **Yes** to confirm that you want to change the interface language.



NOTE: After changing the interface language, extended latin-derived characters such as accents and ligatures can be accessed by pressing and holding a key:

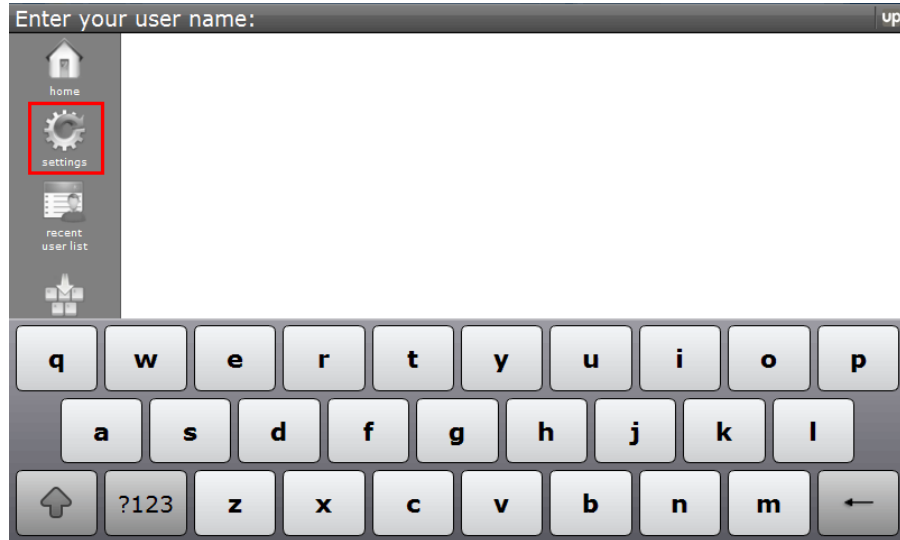


For example, if the interface language is set to French, pressing and holding A would allow for A with accent grave, circumflex, tréma, and the AE ligature.

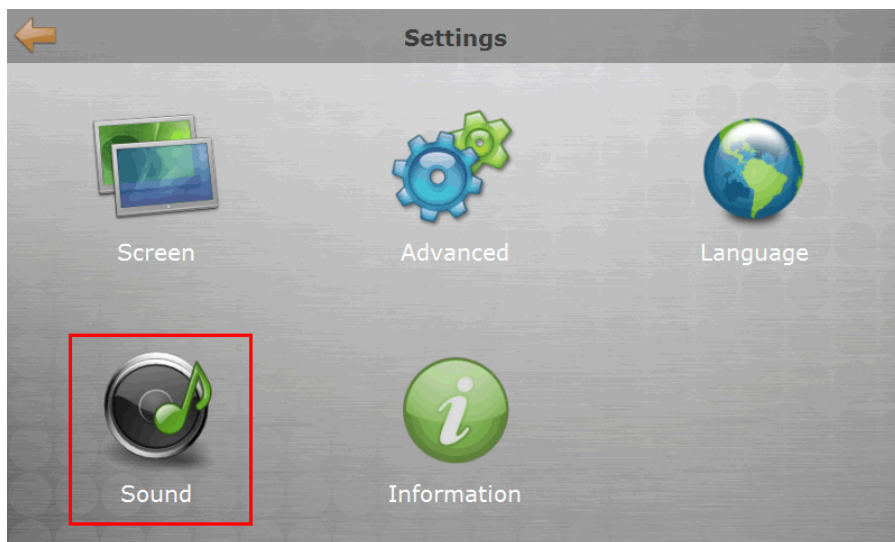
Adjusting Sound and Volume

To change the sound and volume, do the following:

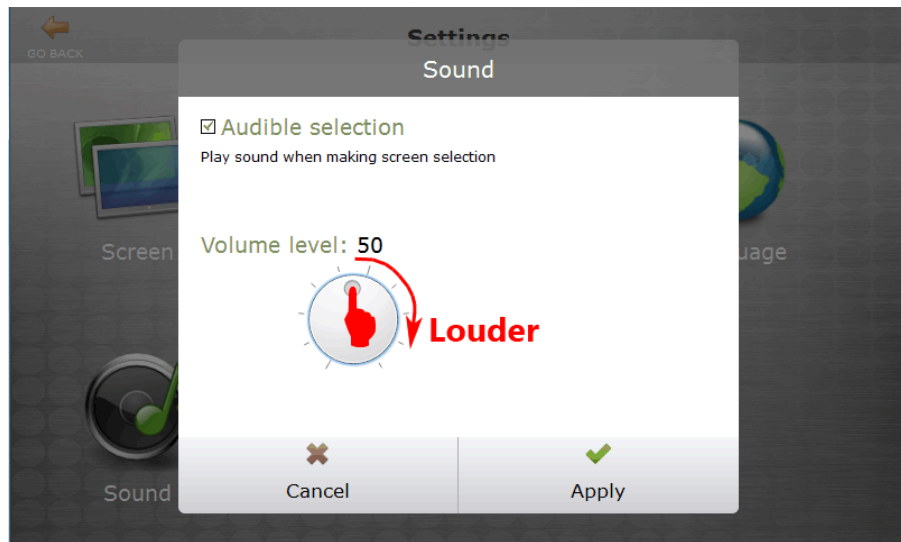
1. In the Home page, tap **Settings**.



2. Tap **Sound**.



3. Press, hold and drag the volume wheel to adjust the volume level.

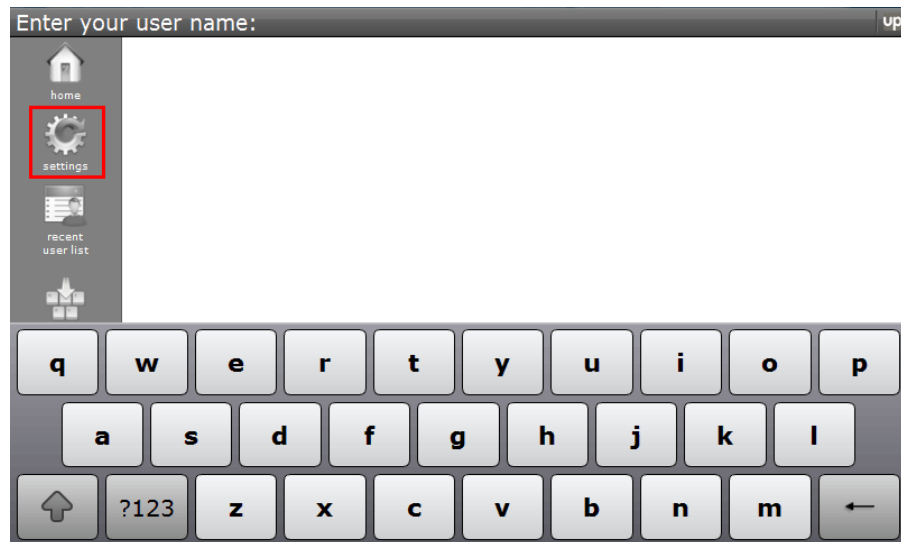


4. Tap **Apply**.

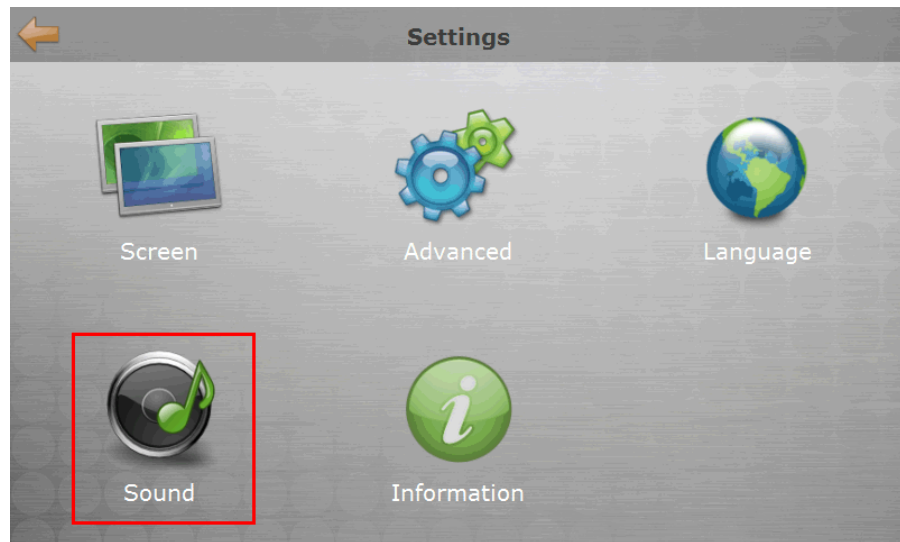
Muting Tap Sounds

To mute the tap sounds, do the following:

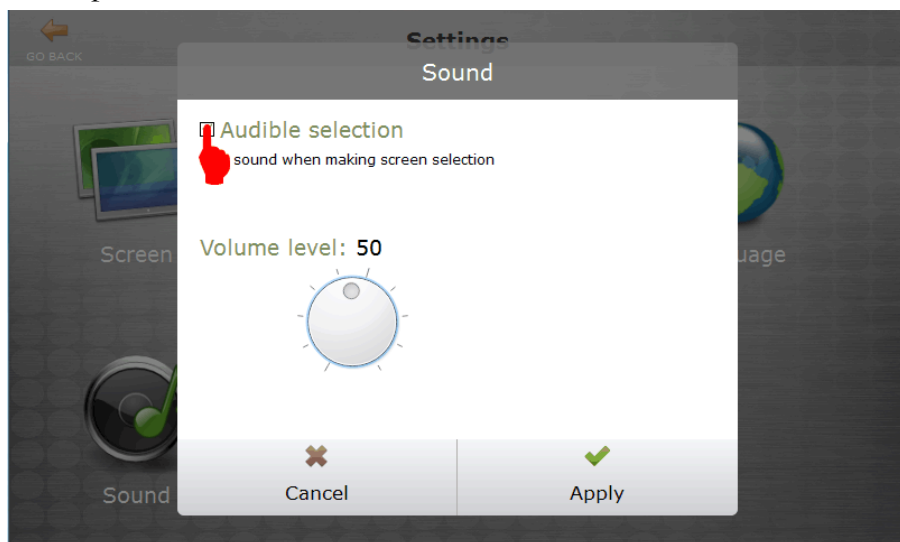
1. In the Home page, tap **Settings**.



2. Tap **Sound**.



3. Tap to clear **Audible selection**.



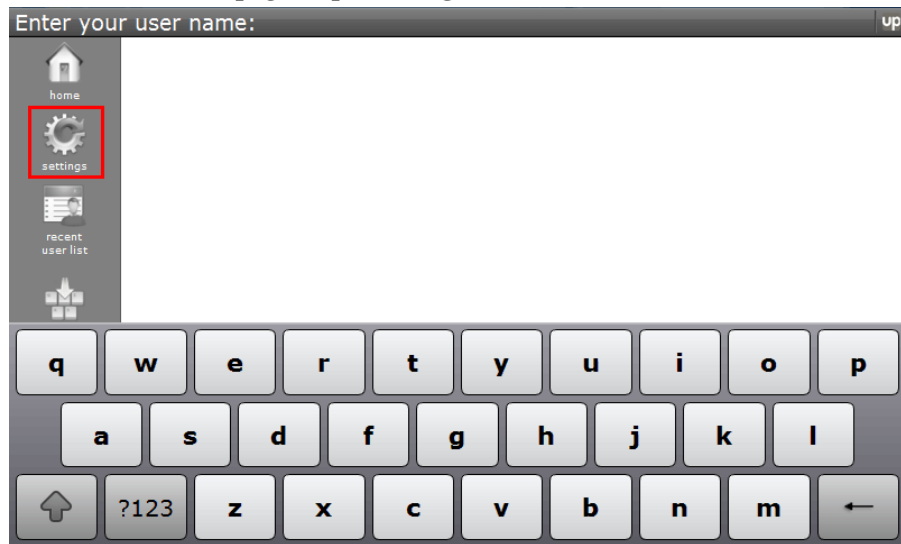
4. Tap **Apply**.

Retrieving Information About the vPad Device

From the vPad Information screen, you can find out how much free memory is available, the device's IP address and which UniPrint Print Server it is connected to.

To learn more about your vPad device, do the following:

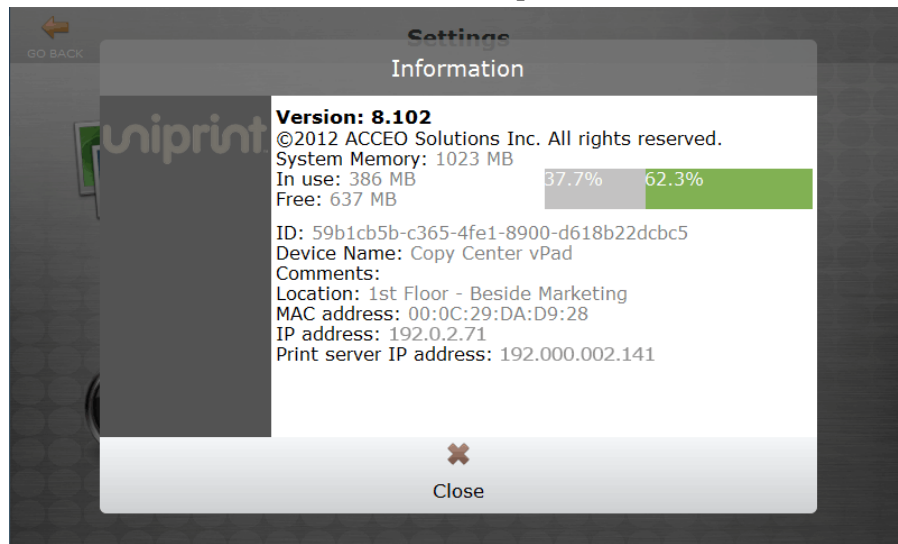
1. In the Home page, tap **Settings**.



2. Tap **Information**.

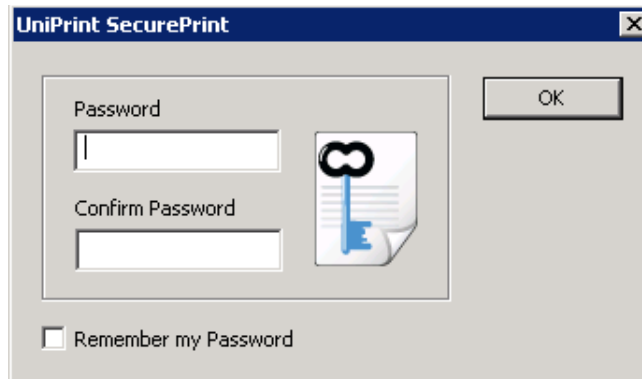


3. Review the information and then tap **Close**.



Setting up your SecurePrint Password

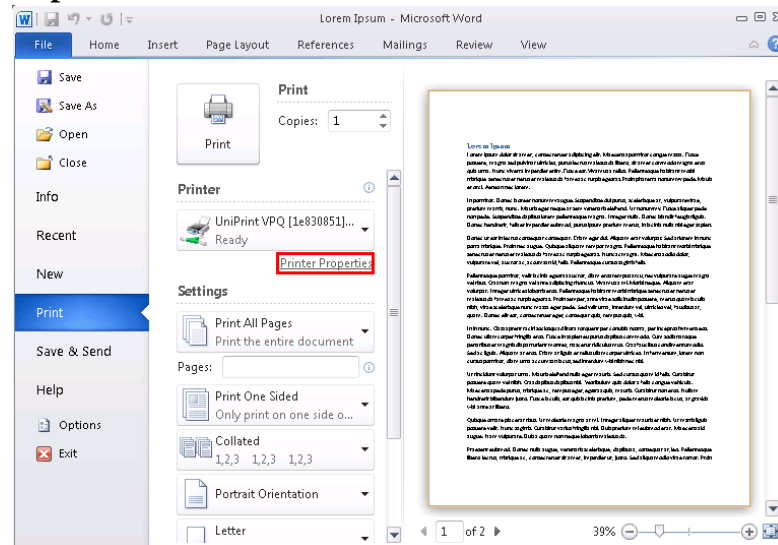
If Force Password is enabled, the user will be required to enter a password each time they print to the UniPrint VPQ or any Gateway printer.



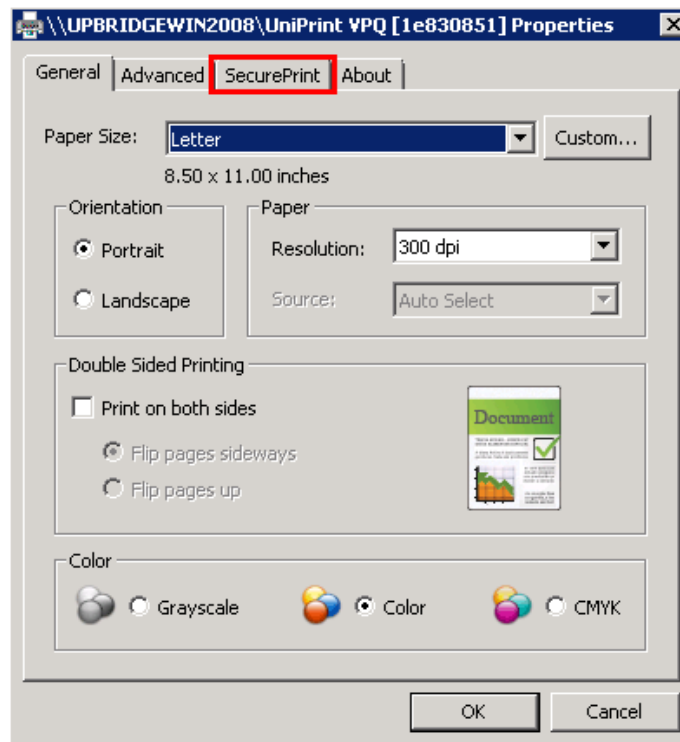
If Force Password is not enabled, then to set up a password the user needs to do the following:

1. In an ICA/RDP session, open an application and then click **Print**.

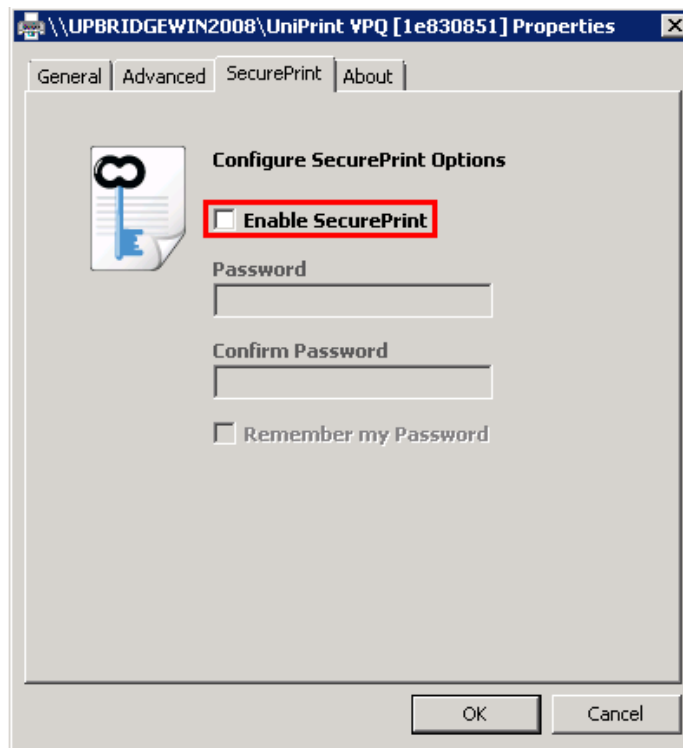
2. Select a Gateway printer or UniPrint VPQ and then click **Printer Properties**.



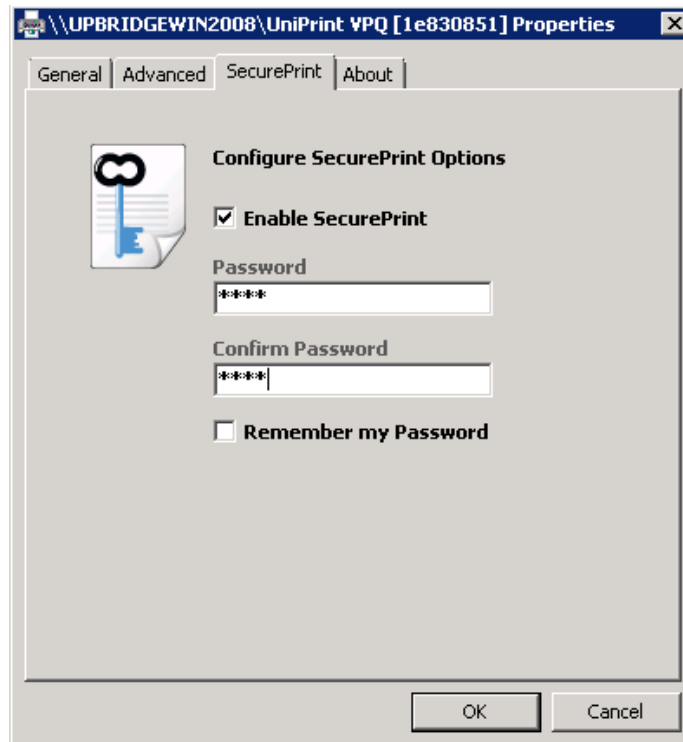
3. Click the **SecurePrint** tab.



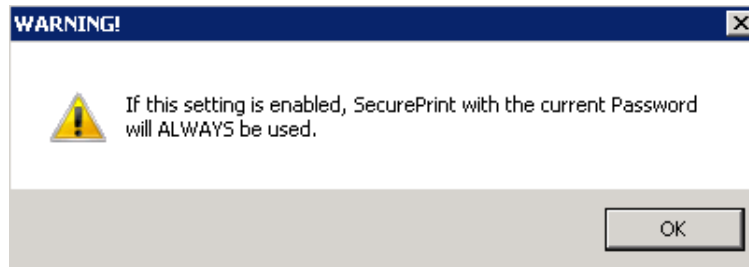
4. Select **Enable SecurePrint**.



5. Enter your password twice. If you want your SecurePrint Password to remain persistent between sessions, select **Remember my Password**.




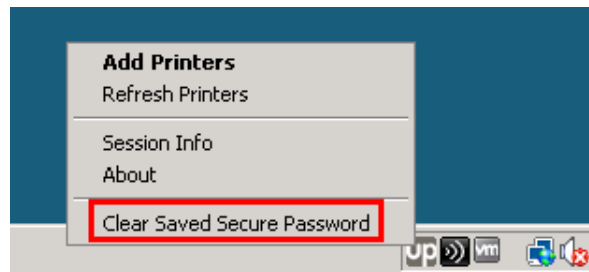
- Click **OK** to clear the warning message and then click **OK** again.



Resetting your SecurePrint Password

If **Remember my Password** was selected when you initially set your SecurePrint Password, you can clear the it by doing the following:

- Within an RDP/ICA session, in the notification area, right-click .
- Click **Clear Saved Secure Password**.

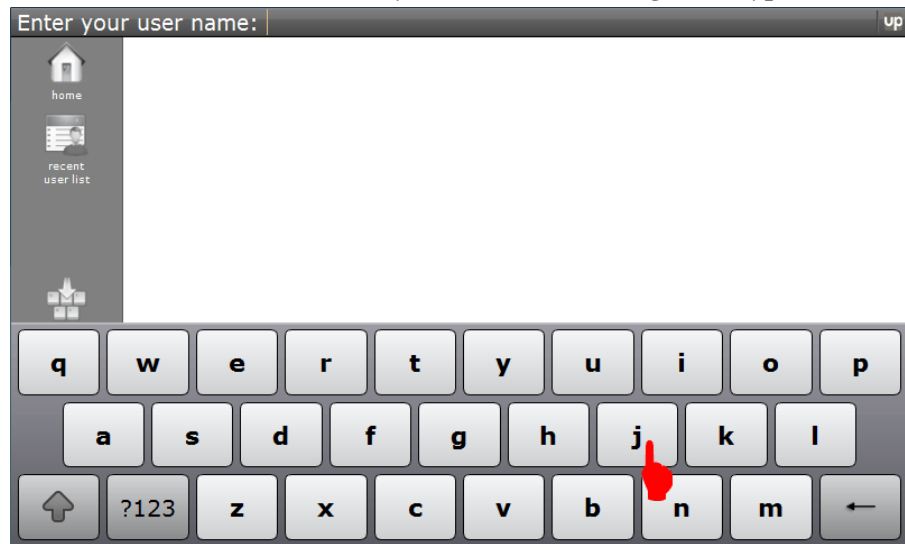


- Click **Yes** to confirm that you want to reset your password.

Retrieving Your Document Through the vPad Device

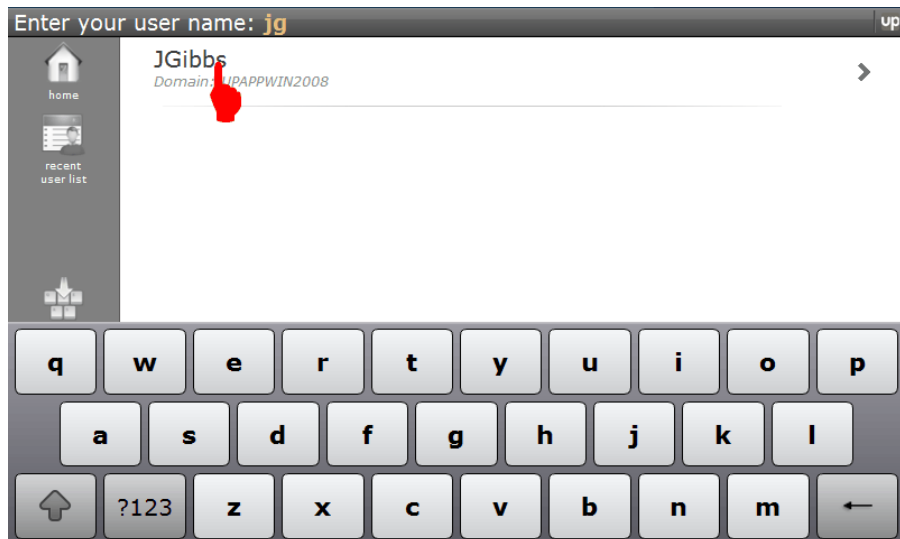
The following instructions assumes that a SecurePrint Password has been set.

1. At the vPad device, enter your user name using the keypad.

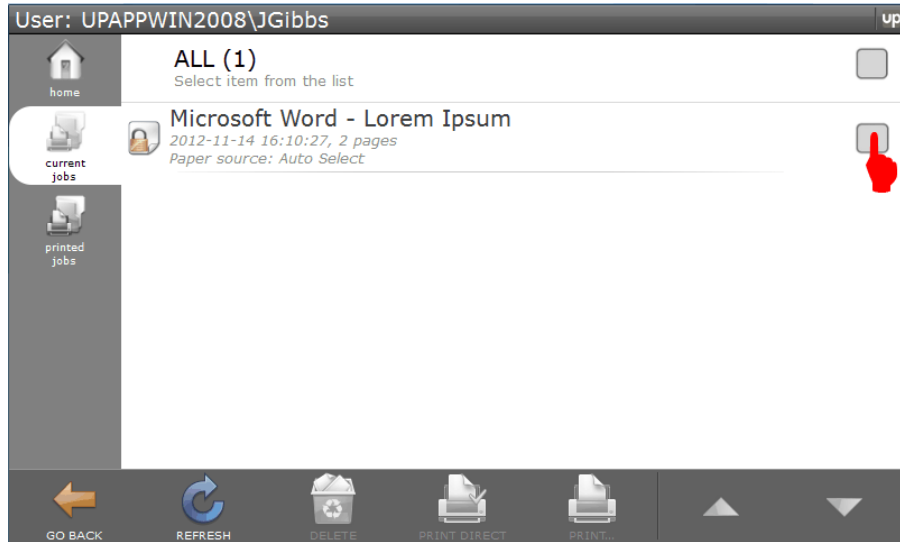


- a) Or tap **Hide Keypad**, .

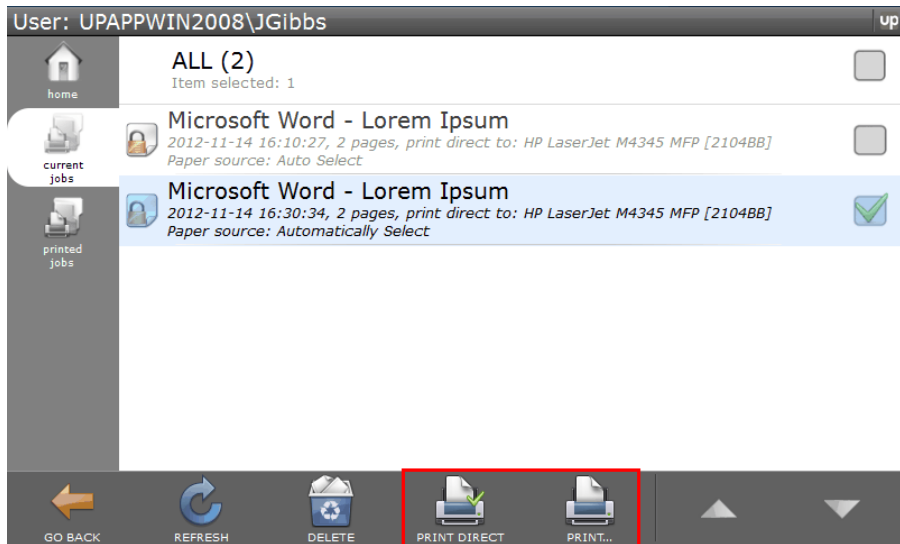
2. Tap your user name.



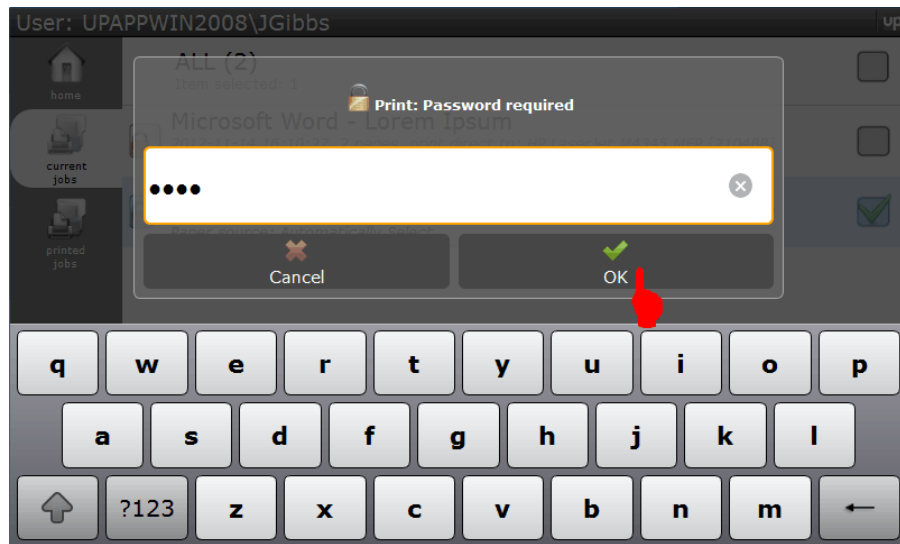
3. Tap to select the document that you want to print or tap **All** to print all documents associated with your user name.



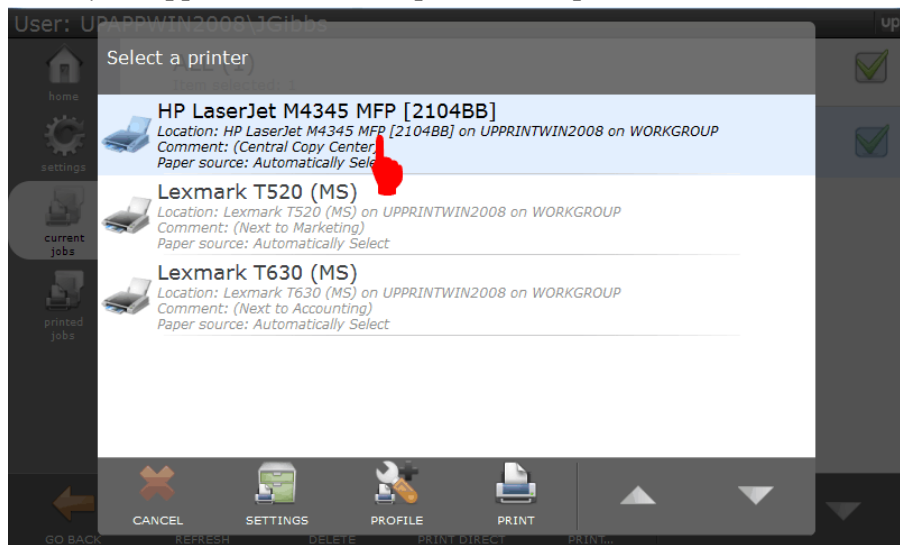
4. Tap either **Print** or **Print Direct**. If you print to a Gateway printer that is password protected, then you can avoid selecting a printer on the vPad by tapping **Print Direct**.



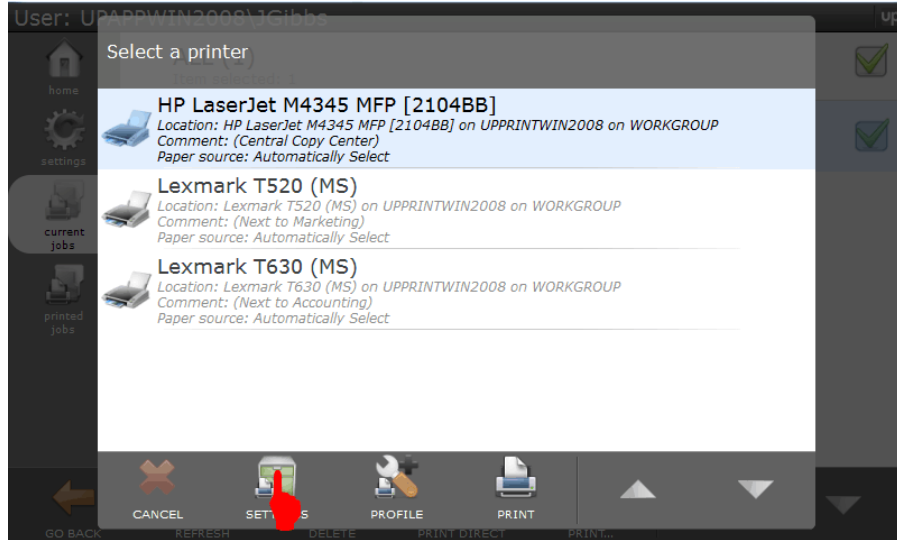
5. Enter your password and then tap **OK**.



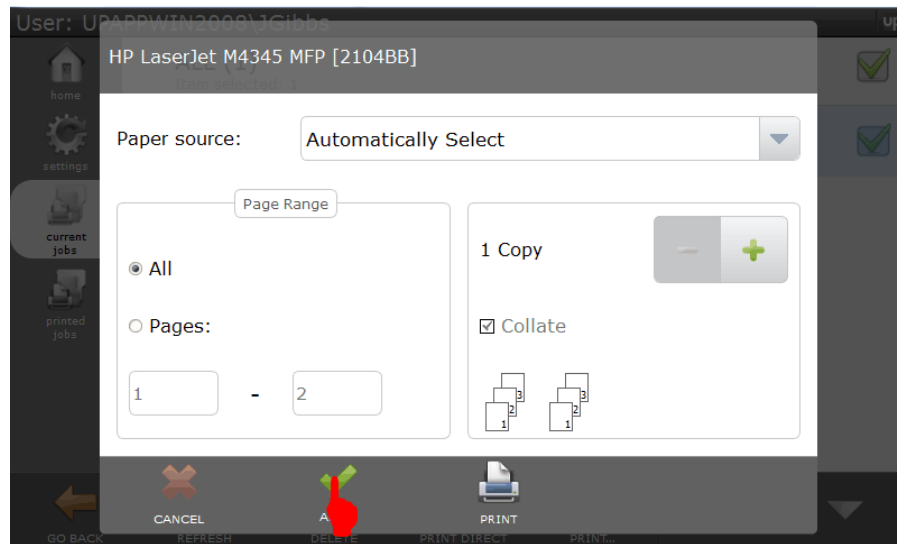
6. If you tapped **Print**, then tap to select a printer.



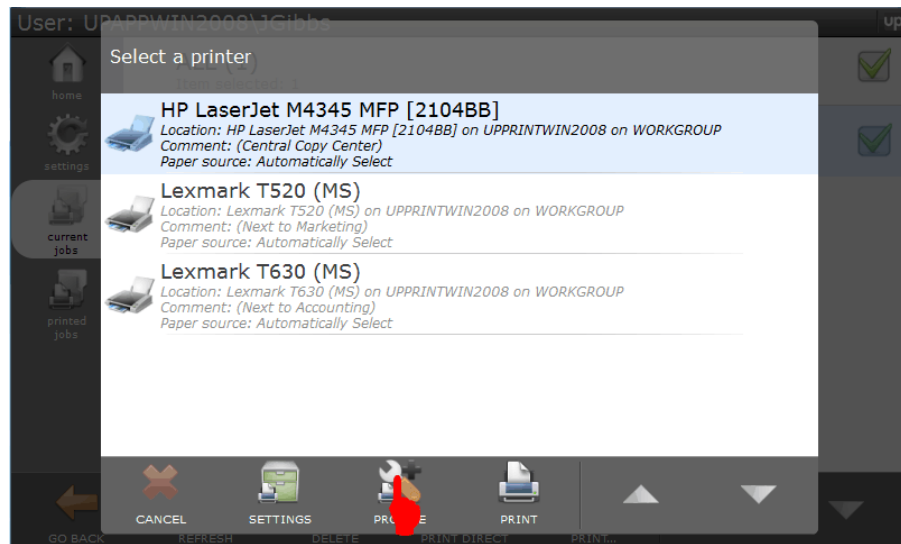
7. To change the paper source, page range or number of copies, tap **Settings**.



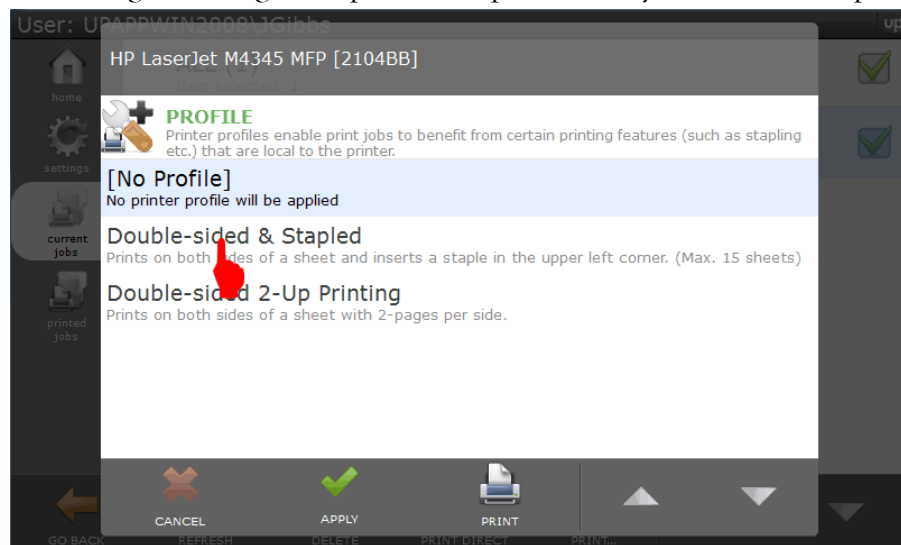
8. Tap to change the settings and then tap either **Apply**, if you have more settings to change or tap **Print**, to print directly to the selected printer.



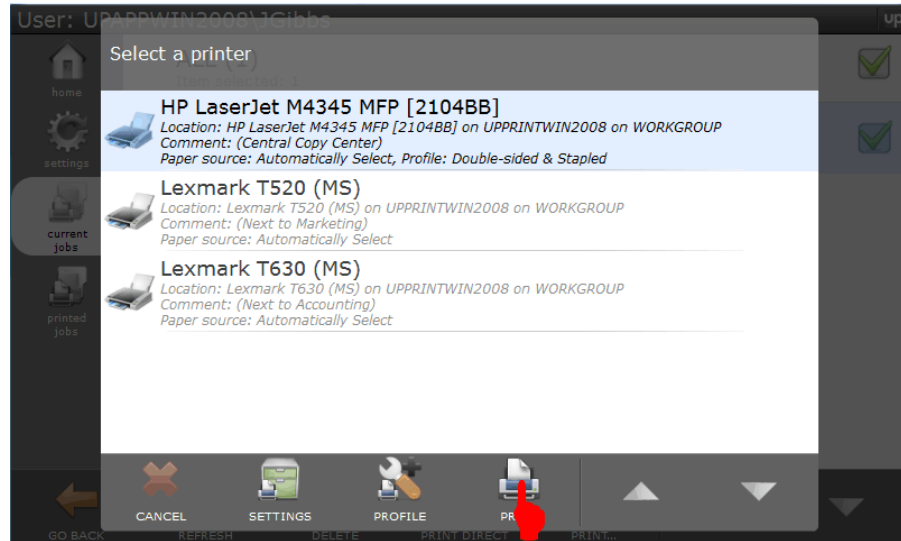
9. To select a printer profile, tap **Profile**.



10. Tap to select a profile and then tap either **Apply**, if you have more settings to change or tap **Print** to print directly to the selected printer.



11. Tap **Print** and the print job will be released and sent to the selected printer with the specified properties applied.



Configuring Print Job Archiving

New in version 8.1 is Print Job Archiving. This feature allows network administrators to setup a location to archive all print jobs sent to any UniPrint Print Server or UniPrint Application Server that has the Archive Client installed.

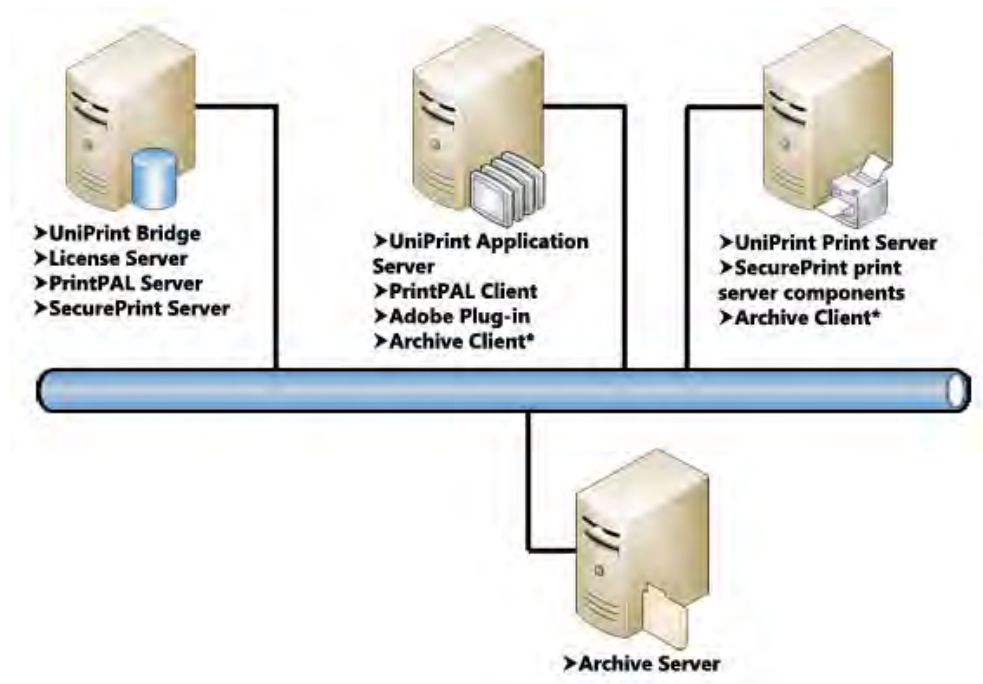
This feature differs from the UniPrint (Save PDF) queue in that the user does not have to actively select a print queue or change printer properties in order for their print job to be archived. The UniPrint (Save PDF) queue is intended to be used on a job-by-job basis, whereas Print Job Archiving will save a copy of all print jobs sent to the VPQ, Gateway printers, UniPrint queue, UniPrint (Email PDF) queue and UniPrint (Save PDF) queue.

Deployment Scenarios

The Archive Server can be installed on any Windows 2003/2008/2012 Server and can even be installed on the same machine as the UniPrint Bridge. By default, the location of the archive is where ever the Archive Server component is installed.



NOTE: Only one instance of the Archive Server can exist in a UniPrint deployment. While there can be many instances of the Archive Client depending on which print jobs are required for archiving.

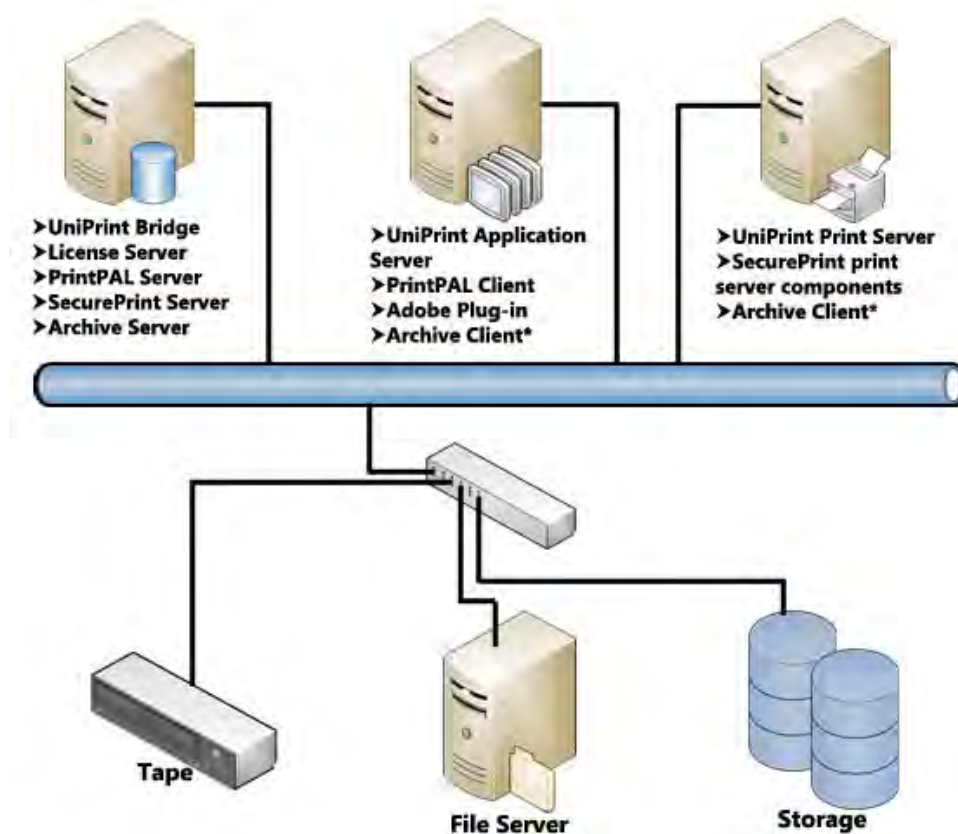
Standard Deployment

With the standard deployment, the Archive Server is installed on a separate machine. If the Archive Client is installed on the same machine as the UniPrint Application Server component, then all print jobs sent to the UniPrint queue and if enabled also to the UniPrint (Email PDF) and UniPrint (Save PDF) queues will be copied to the Archive Server. If the Archive Client is installed on the same machine as the UniPrint Print Server, then all print jobs sent to a Gateway printer queue will be copied to the Archive Server.

The default location is **//Program Files/UniPrint Suite/Services/Data/Archive.**

These archived files are saved as .PPF and .PCF files. The .PPF file is a copy of the actual PDF file and can be opened by changing the file extension to .PDF and opening it with a PDF reader. The .PCF file contains configuration information and PDF properties which can be read by opening the .PCF file with a text reader, such as Notepad.

Custom Deployment



In a custom deployment scenario, the Archive Server component can be installed on any of the other UniPrint components. In the example above, the Archive Server is installed on the UniPrint Bridge. From the UniPrint Bridge, the archiving can be redirected to a network location as long as the system account rights are the same in both locations – the Archive Server location and the mapped drive location.



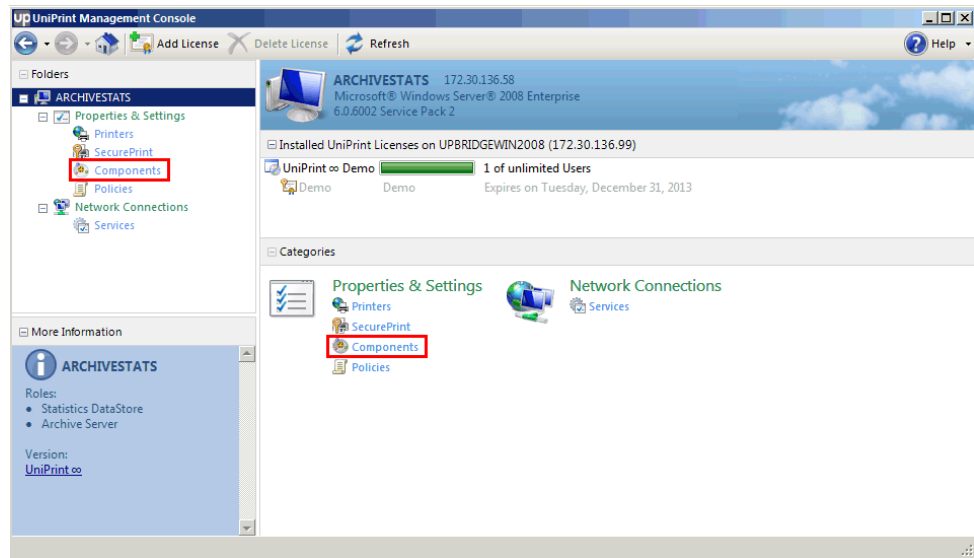
BEST PRACTICE: It is recommended that the Archive Server component be installed on the same computer where the print jobs are to be archived. See ["Standard Deployment" on page 242](#).

UniPrint printer print jobs are archived, if the Archive Client is installed on the UniPrint Application Server and Gateway printer print jobs are archived, if the Archive Client is installed on the UniPrint Print Server.

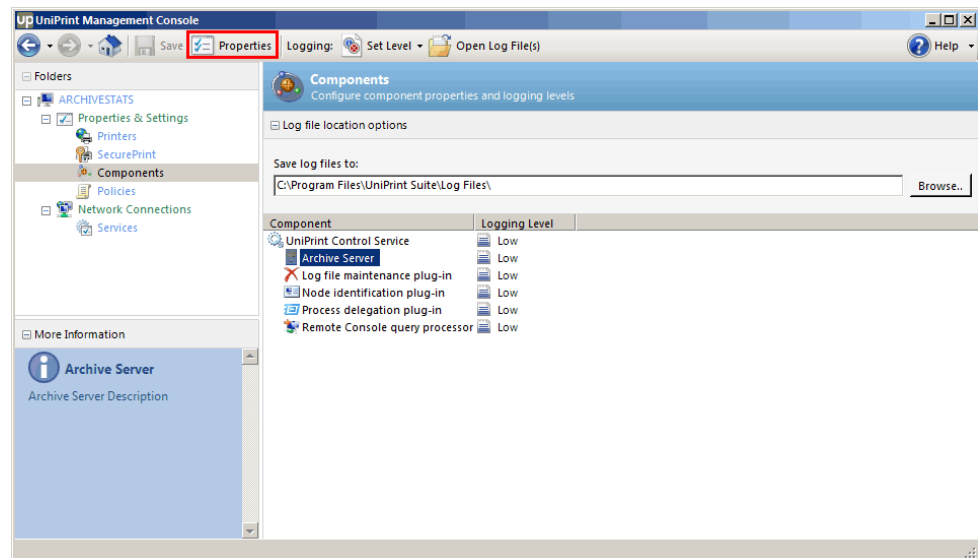
Changing the Archive Location

By default print jobs are archived on the Archive Server. However, the location can be changed by doing the following:

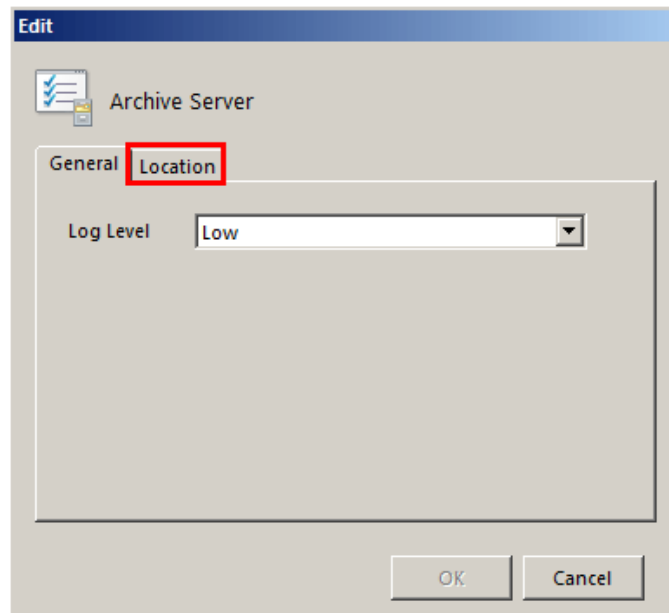
1. On the Archive Server, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **Components**.




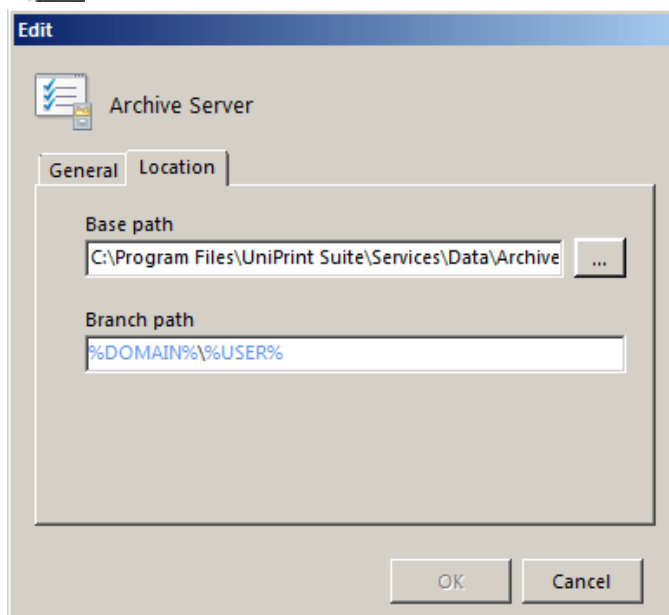
3. Click to select **Archive Server** and then click **Properties**.



- Click the **Location** tab.



- Click  and then browse to a new location.



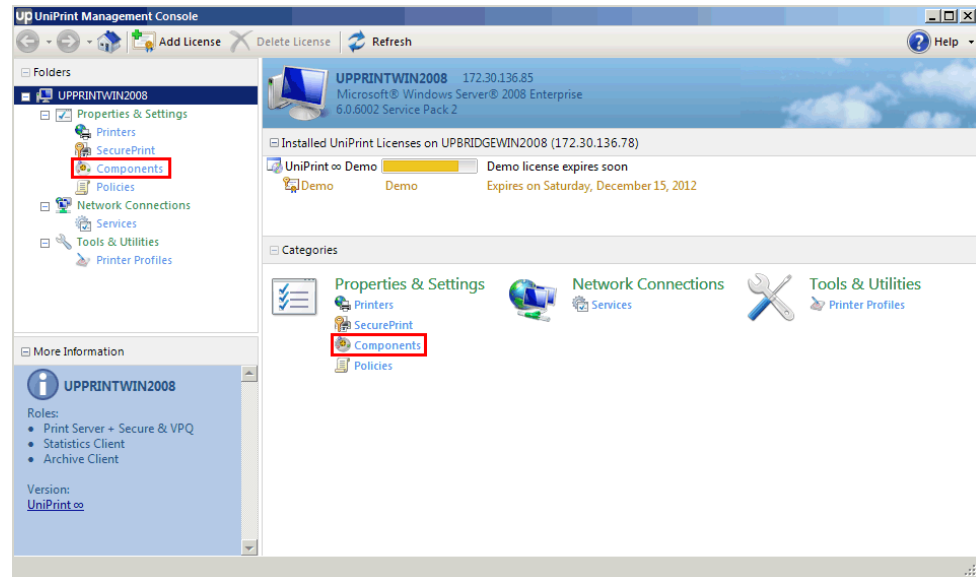
- Click **OK** and then click **OK** again.

Restricting When Print Jobs Are Archived

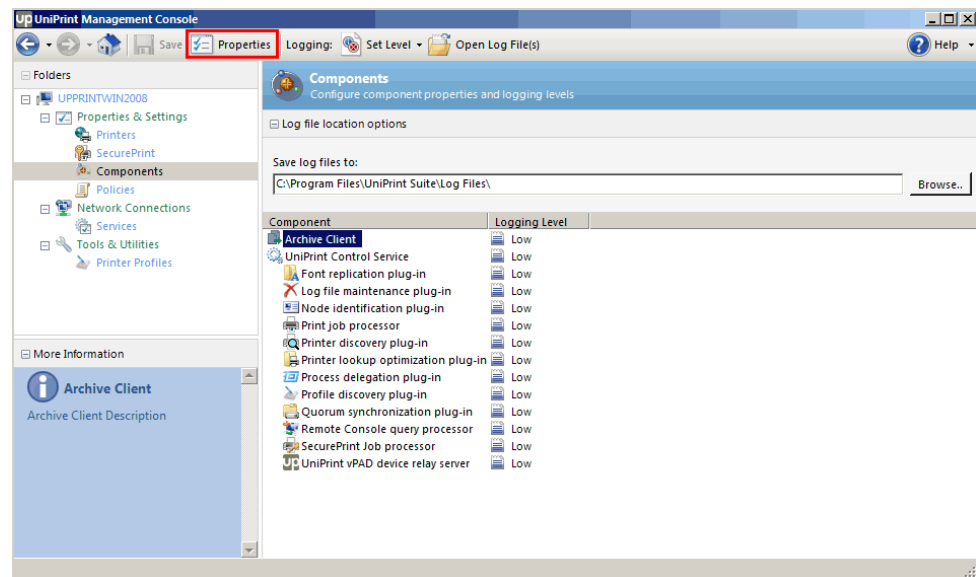
Print jobs archiving can be restricted to occur during a certain time of the day. For example, if print jobs are only to be archived during business hours, then the time frame can be set.

To restrict when print jobs are archived, do the following:

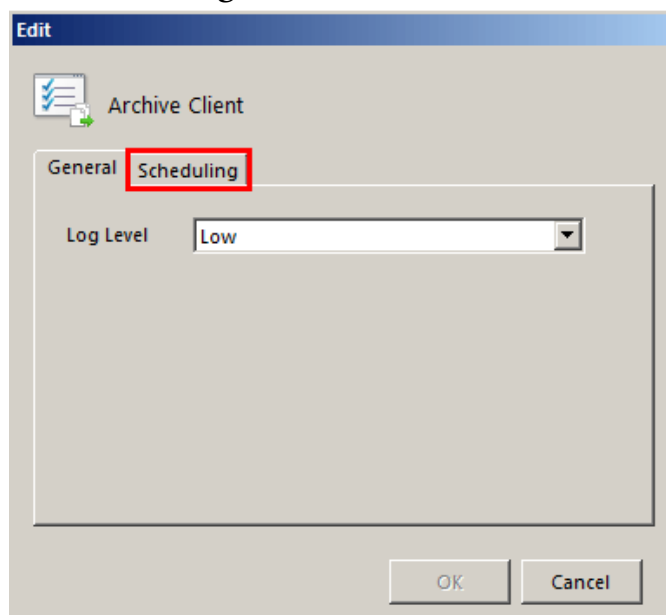
1. On either the UniPrint Application Server or UniPrint Print Server, open the **UniPrint Management Console**.
2. Under **Properties & Settings**, click **Components**.



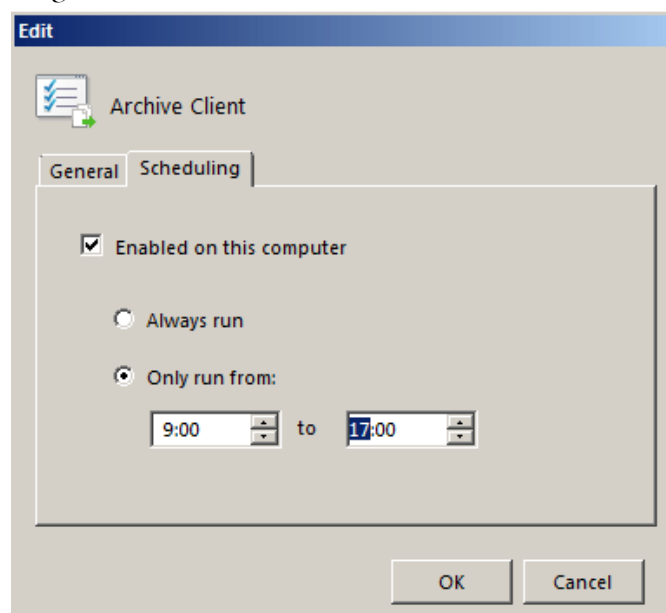
3. Click to select **Archive Client** and then click **Properties**.



- Click the **Scheduling** tab.



- Select **Only run from** and then edit the time to run print job archiving. Click **OK**.



New in version 8.1 is Print Job Statistics Monitoring. This feature allows network administrators to capture print job statistics from printers installed on any UniPrint Print Server or from the UniPrint, UniPrint (Save PDF) and UniPrint (Email PDF) print queues on the UniPrint Application Server that has the Statistics Client installed.

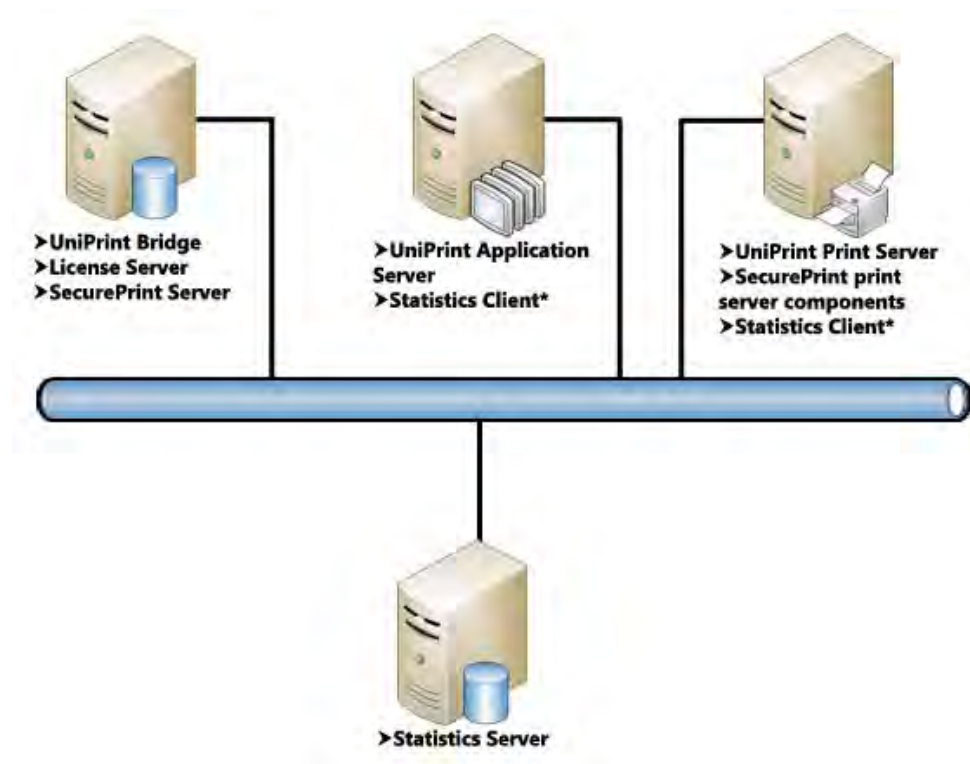
Deployment Scenario

The Statistics Server can be installed on any Windows 2003/2008/2012 Server and can even be installed on the same machine as the UniPrint Bridge. By default, the location of the statistics database is where ever the Statistics Server component is installed.



NOTE: Only one instance of the Statistics Server can exist in a UniPrint deployment. While there can be many instances of the Statistics Client depending on which print jobs require monitoring.

Standard Deployment



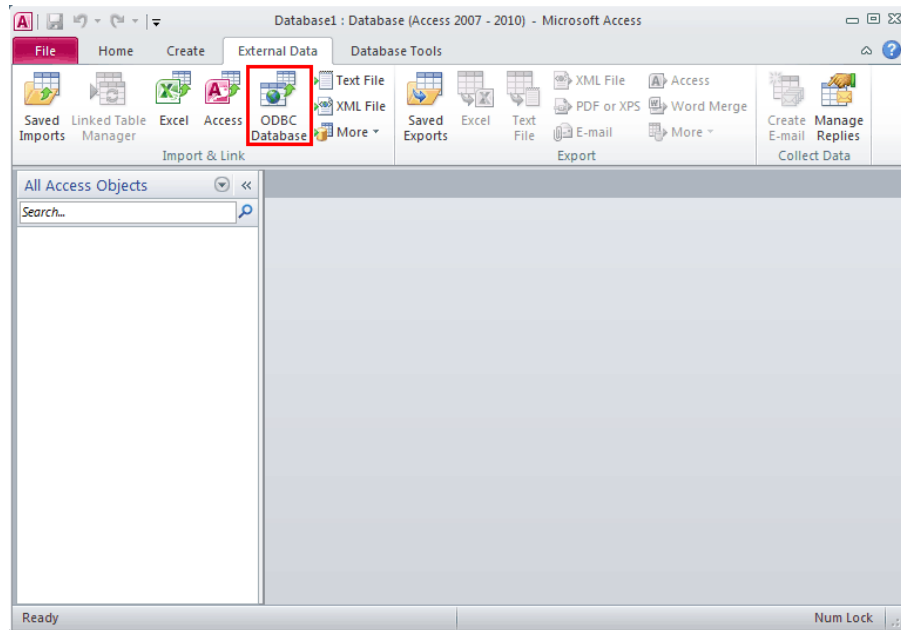
With the standard deployment, the Statistics Server is installed on a separate machine. If the Statistics Client is installed on the same machine as the UniPrint Application Server component, then all print job statistics will be captured from the UniPrint queue and if enabled also to the UniPrint (Email PDF) and UniPrint (Save PDF) queues and then stored on the Statistics Server. If the Statistics Client is installed on the same machine as the UniPrint Print Server, then all print job statistics will be captured from all Gateway printer queues and stored on the Statistics Server.

Retrieving Print Job Data From The Statistics Server

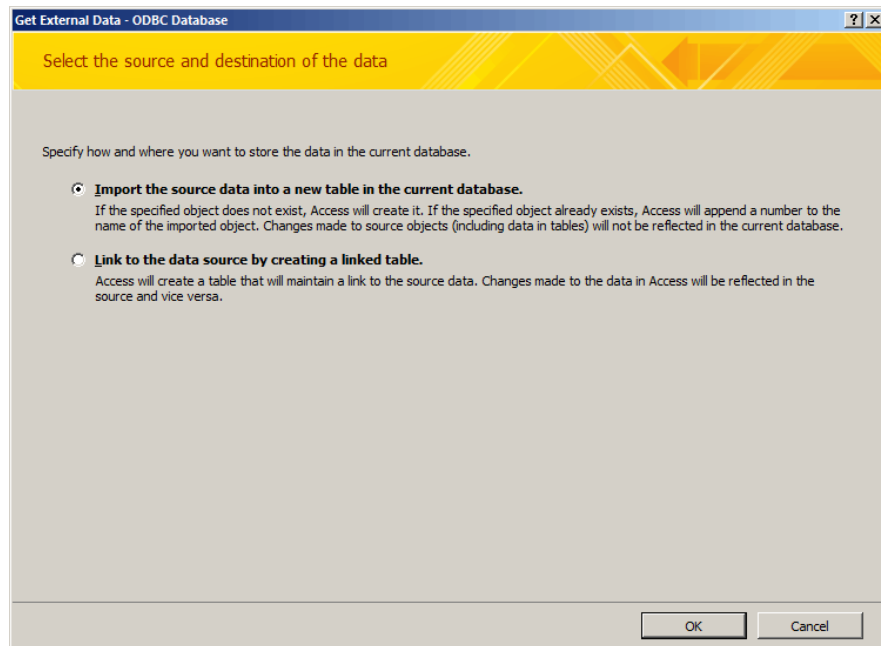
Statistics can be retrieved and displayed from any application that can establish an ODBC connection to the statistics database. The following steps demonstrate how to do this using Microsoft Access 2010. For other applications, for example Crystal Reports, refer to the product documentation on establishing an ODBC connection and importing a database.

1. On the Statistics Server, open Microsoft Access.

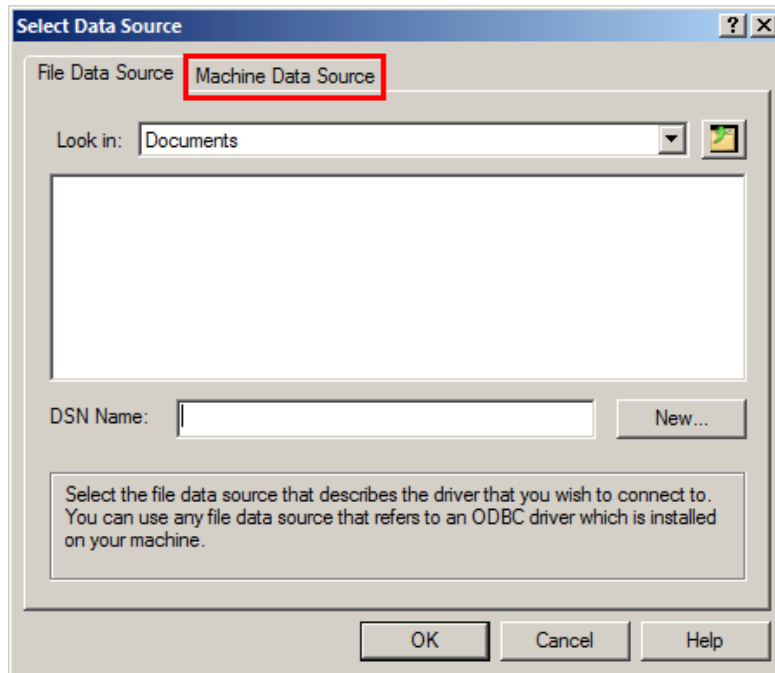
2. Click the **External Data** tab and then click **ODBC Database**.



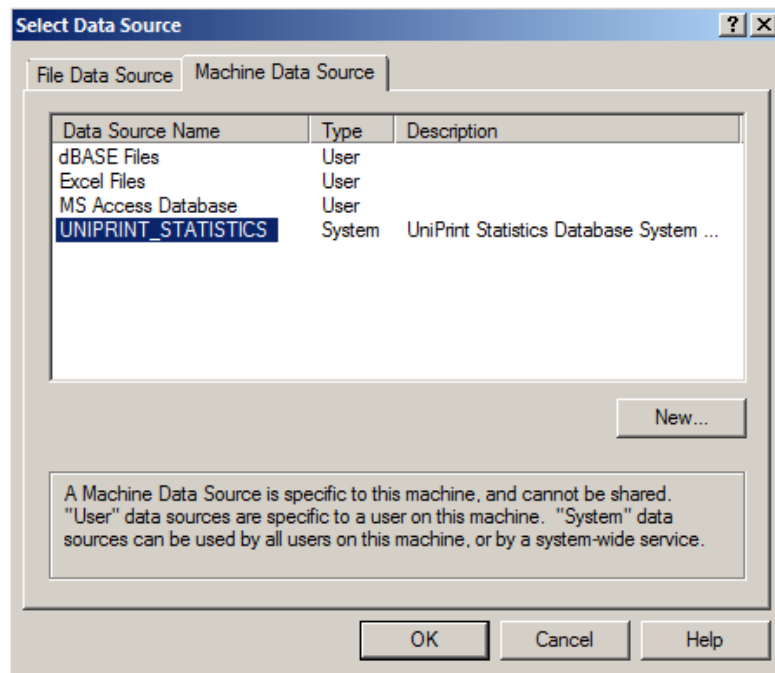
3. Select **Import the source data into a new table in the current database** and then click **OK**.



4. Click the **Machine Data Source** tab.

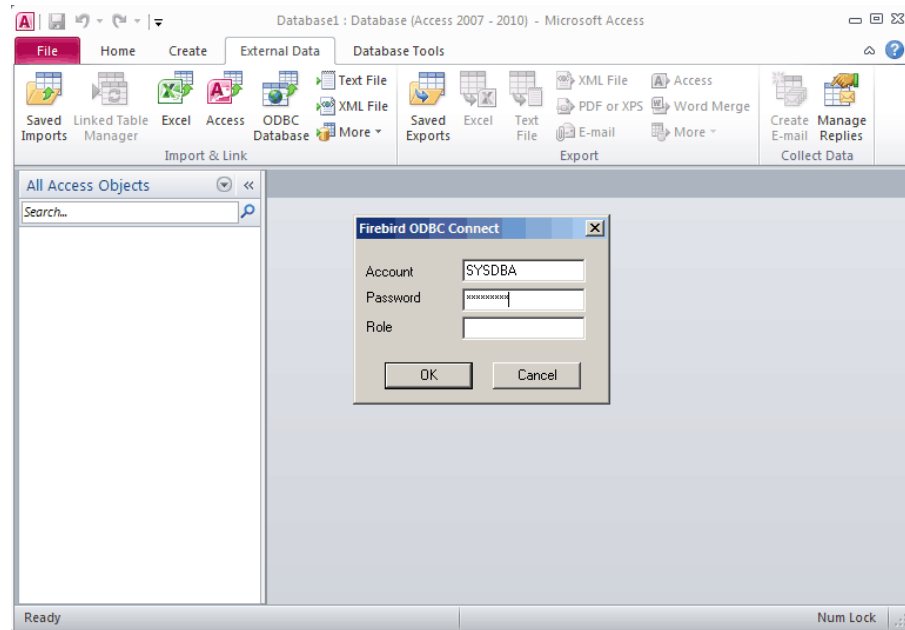


5. Click to select **UNIPRINT_STATISTICS** and then click **OK**.

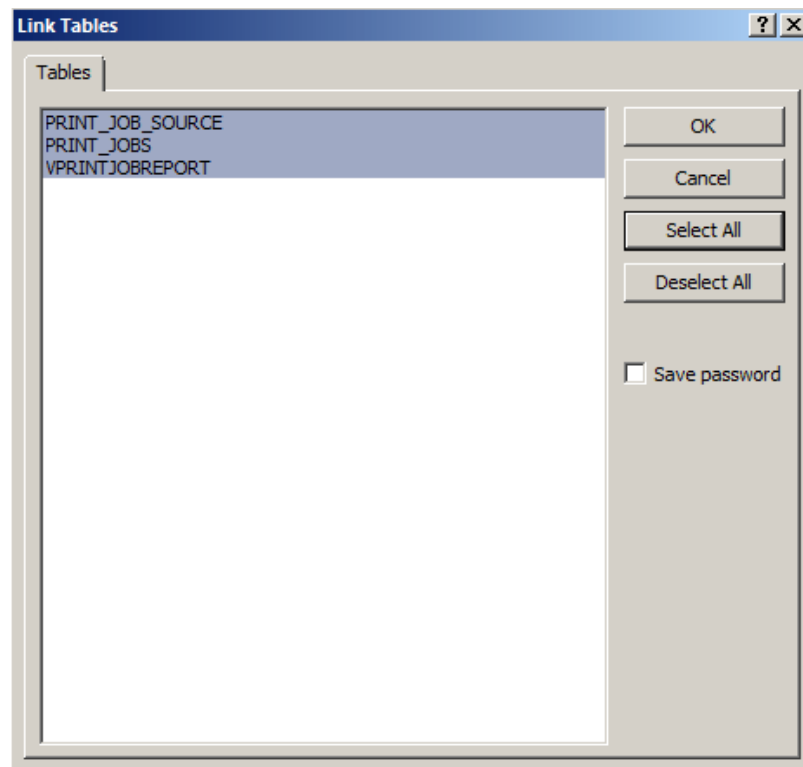


6. Enter the default credentials given below and then click **OK**.
Account: **SYSDBA**

Password: **masterkey**



7. Click **Select All** and then click **OK**.



8. To make retrieving data faster the next time it is required, select **Save import steps** and then give it a name and a description. Click **Save Import**.

Get External Data - ODBC Database

Save Import Steps

All objects were imported successfully.

Do you want to save these import steps? This will allow you to quickly repeat the operation without using the wizard.

☒ Save import steps

Save as: UniPrintStats

Description: Printing statistics from UniPrint

Create an Outlook Task.

If you regularly repeat this saved operation, you can create an Outlook task that reminds you when it is time to repeat this operation. The Outlook task will include a Run Import button that runs the import operation in Access.

☐ Create Outlook Task

Hint: To create a recurring task, open the task in Outlook and click the Recurrence button on the Task tab.

Manage Data Tasks... Save Import Cancel

9. Double-click **VPRINTJOBREPORT** to view the data collected.

JOB_ID	USER_ID	DOMAIN_NAME	ORIGINAL_FILENAME	SOURCE_API	DATA_PATH
1	JGibbs	UPAPPWIN200	Microsoft Word	WINWORD.EXE	92A152...
3	JGibbs	UPAPPWIN200	Microsoft Word	WINWORD.EXE	1FE78D...
2	JGibbs	UPAPPWIN200	Microsoft Word	WINWORD.EXE	00002...
1	JGibbs	UPAPPWIN200	Microsoft Word	WINWORD.EXE	00001...

Printing in a User Session

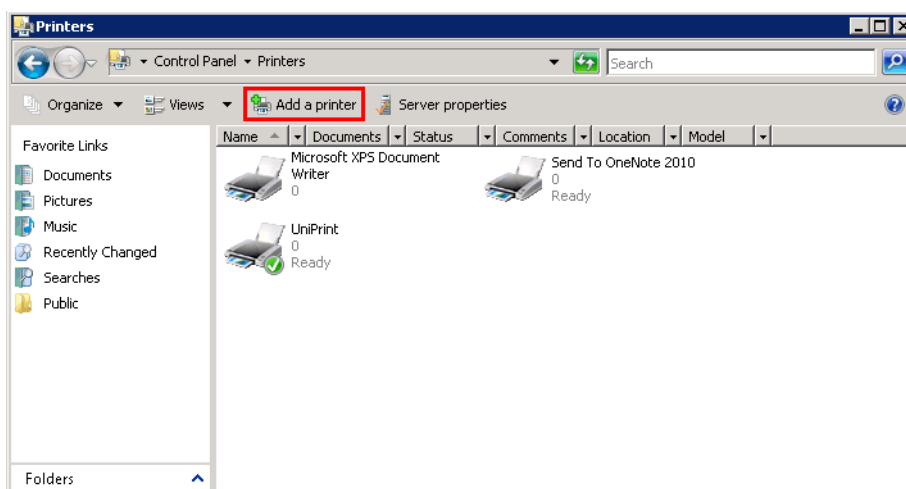
This chapter covers how to print from within a user's RDP or ICA session using UniPrint Infinity and its features.

Adding a UniPrint Gateway Printer Manually In a Session

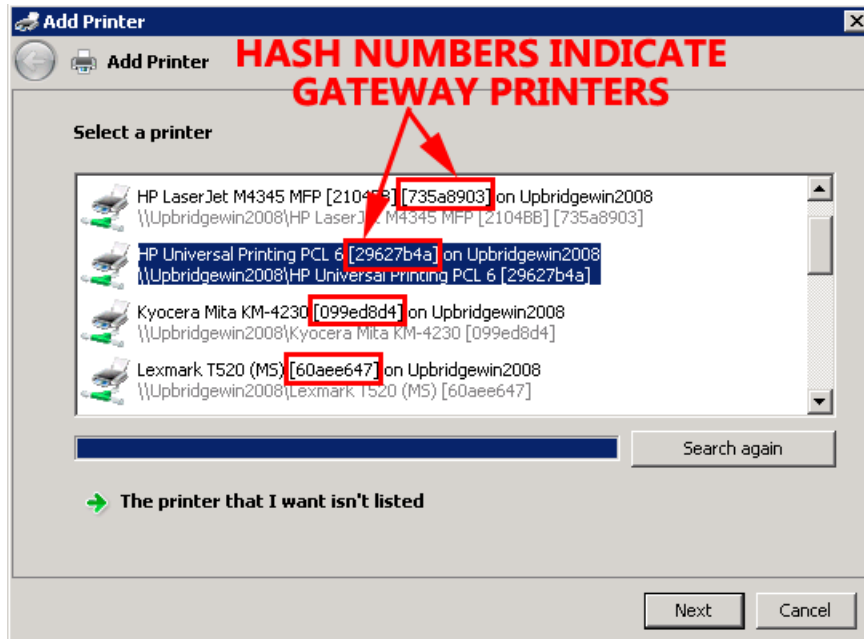
After a printer is added on the UniPrint Print Server and then published to the UniPrint Bridge, it becomes a UniPrint Gateway printer. In order for the user to print to a Gateway printer, they first need to add it in their session. To alleviate this process for the user, you can always use PrintPAL to initially add printers on their behalf.

To add a Gateway printer from within a user's session, do the following:

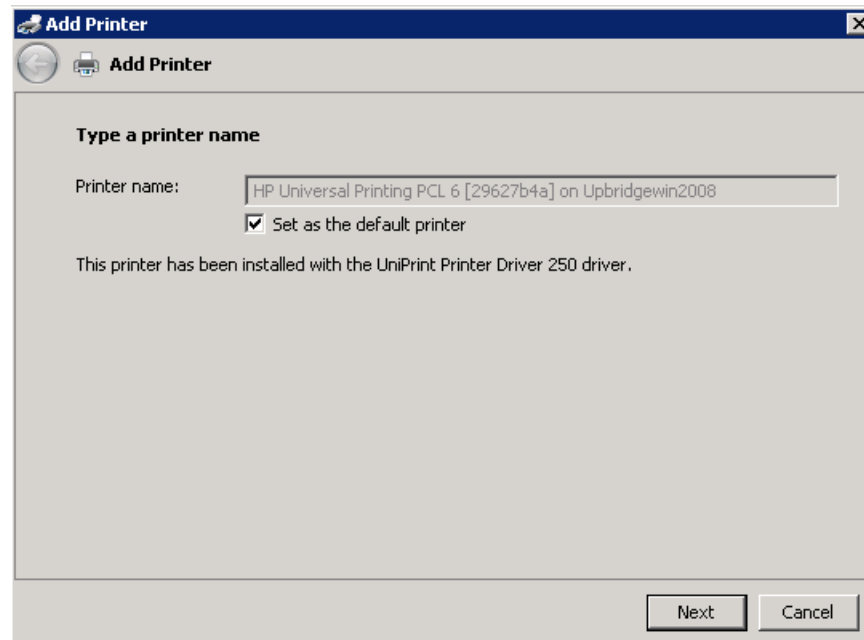
1. Log onto the application server as you normally would through RDP or ICA to access applications.
2. Click **Start**, click **Control Panel** and then double-click **Printers**.
3. Click **Add a Printer**.



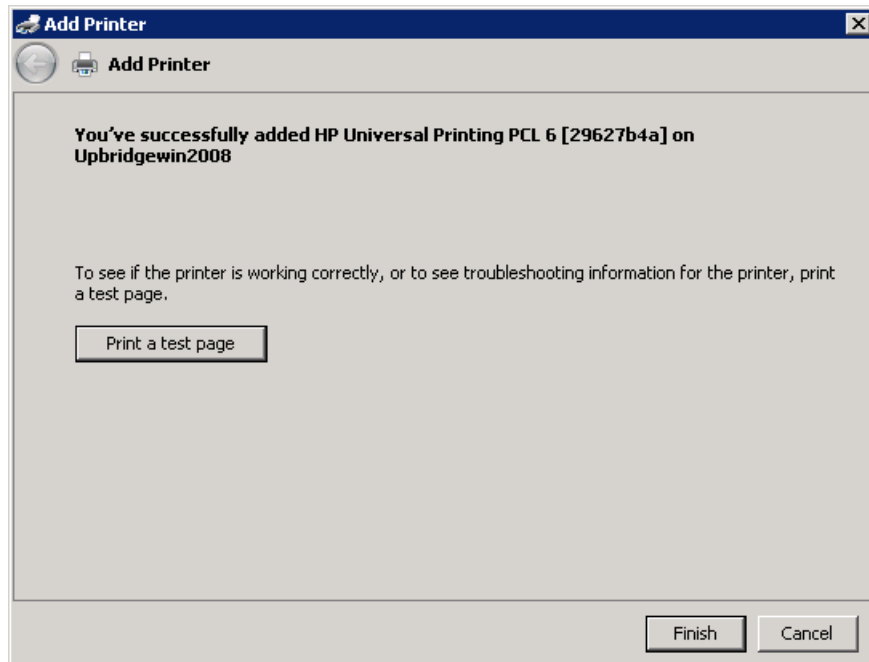
4. Click to select a Gateway printer and then click **Next**. Hash numbers are used to ensure that each Gateway printer is unique and for users they are good indicators that the printer is indeed a Gateway printer.



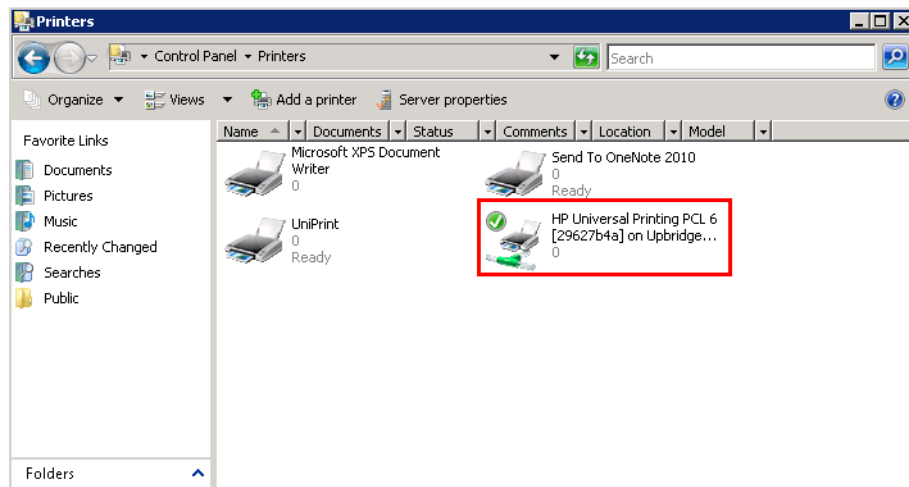
5. If you want this printer to be set as the session default, select **Set as default printer** and then click **Next**.



6. Click **Finish**.



The Gateway printer is now added to the session and is available for printing.

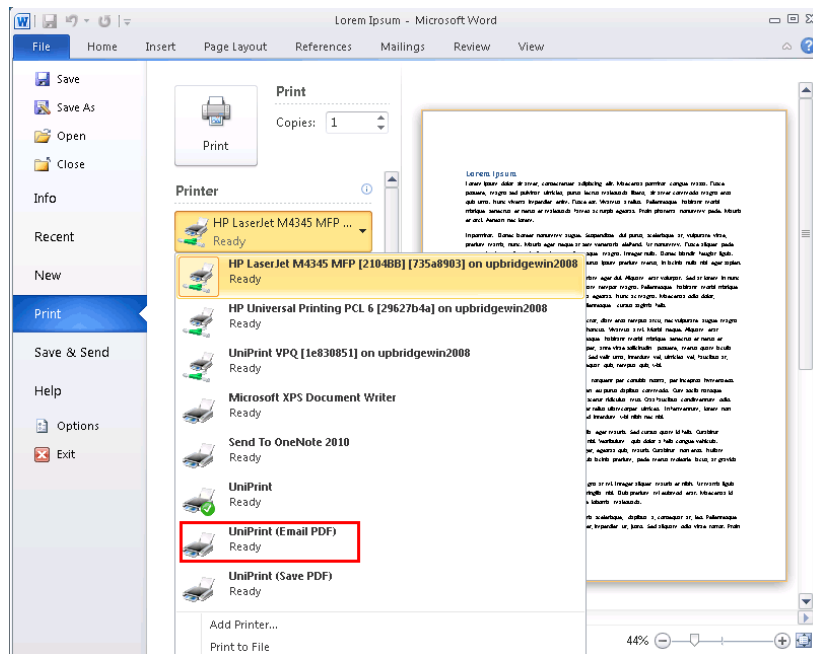


Sending Printed Documents as E-mail Attachments

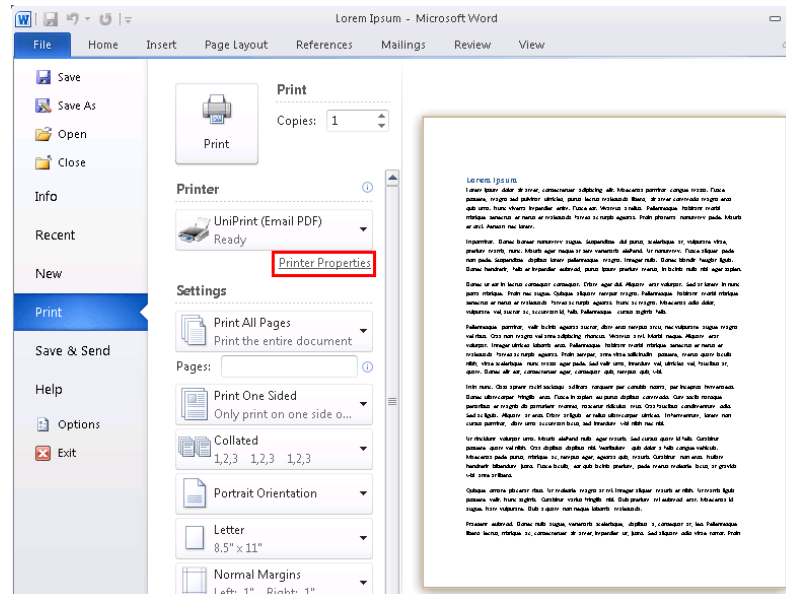
PDF print jobs are sent through the **UniPrint (Email PDF)** printer on the terminal server. Before users can send e-mail, the **UniPrint (Email PDF)** printer queue must first be configured and enabled on the UniPrint Application Server through the UniPrint Management Console. For detailed instructions on how to configure and enable the **UniPrint (Email PDF)** queue, see ["Enabling & Configuring UniPrint To E-mail Print Jobs as PDF Attachments" on page 114](#).

To send the printed document as a PDF attachment, do the following:

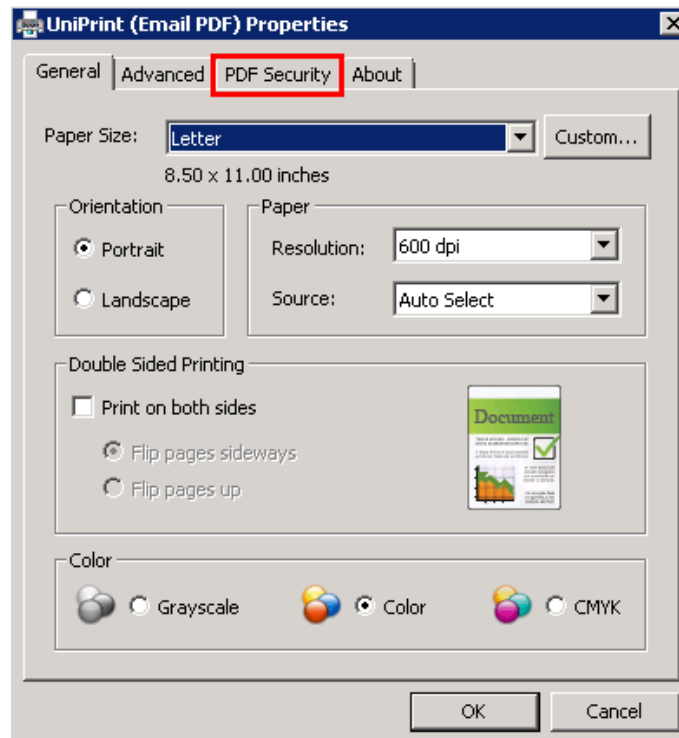
1. Log onto the application server as you normally would through RDP or ICA to access applications.
2. Open an application from which to print, for example, Microsoft Word.
3. Print from the application.
4. Select the **UniPrint (Email PDF)** printer.



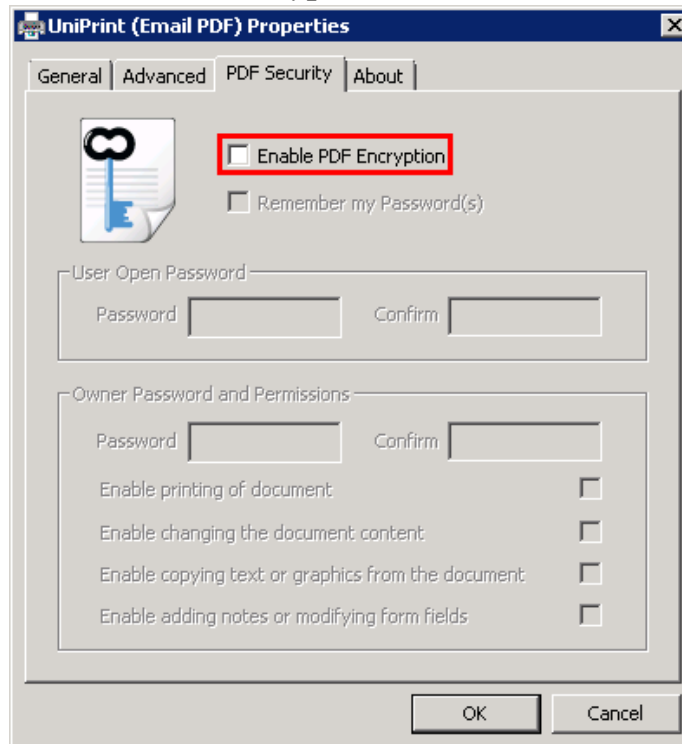
5. To add security to the content of the PDF created, click **Printer Properties**.



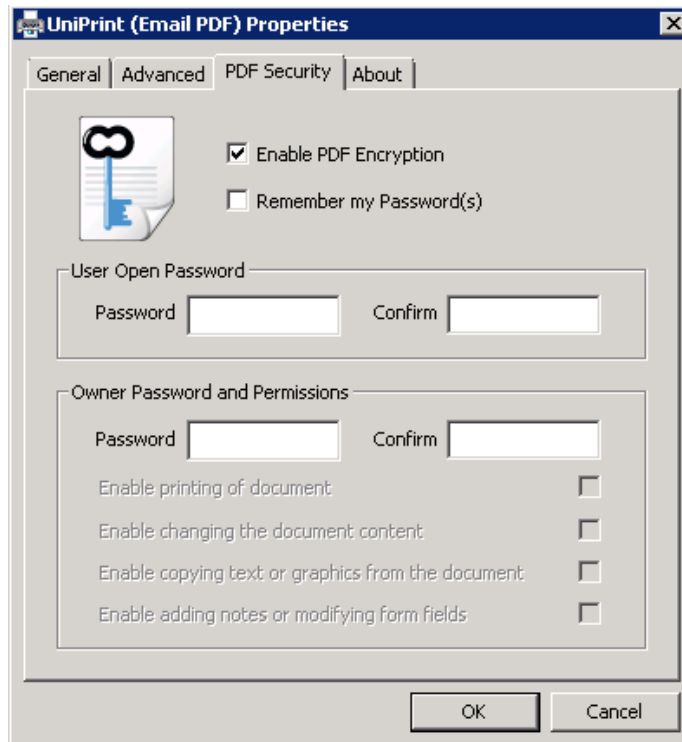
6. To apply password protection and/or to change or restrict certain features to the created PDF file, click the **PDF Security** tab.



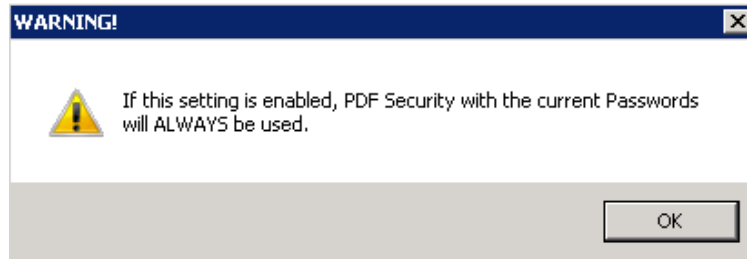
7. Select **Enable PDF Encryption**.



8. If you want your password(s) to remain persistent from session to session, select **Remember my Password(s)**.

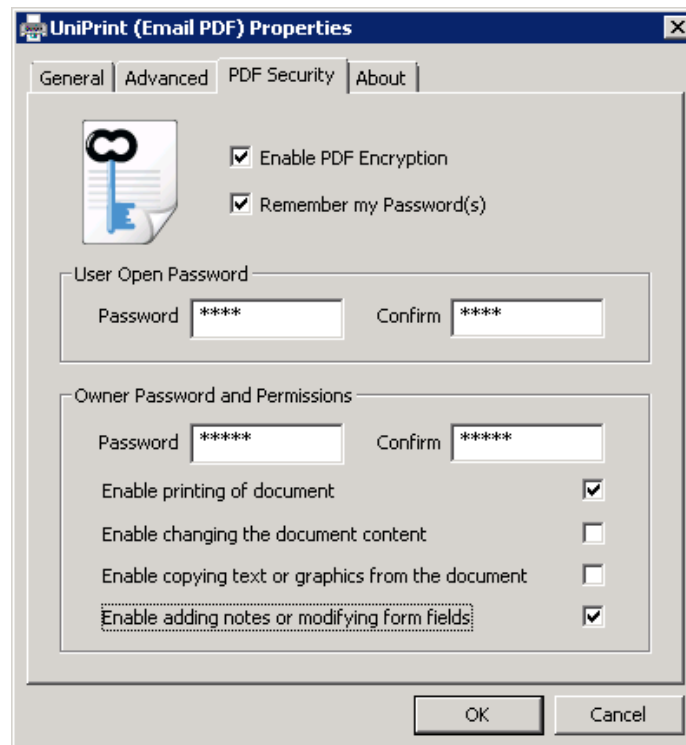


9. A message will appear warning you that a PDF security with the current password(s) will be used each and every time you print to the UniPrint (Email PDF) printer. Click **OK**.



BEST PRACTICE: If a password is forgotten, there is no way to recover the password from the PDF file. It is highly recommended that you keep a backup copy of the document that is not password protected.

10. There are two sets of passwords, the **User Open Password** and the **Owner Password and Permissions** password.



User Open Password: With the **User Open Password**, users must type in this password, specified by the sender, to open the PDF document in a PDF reader.

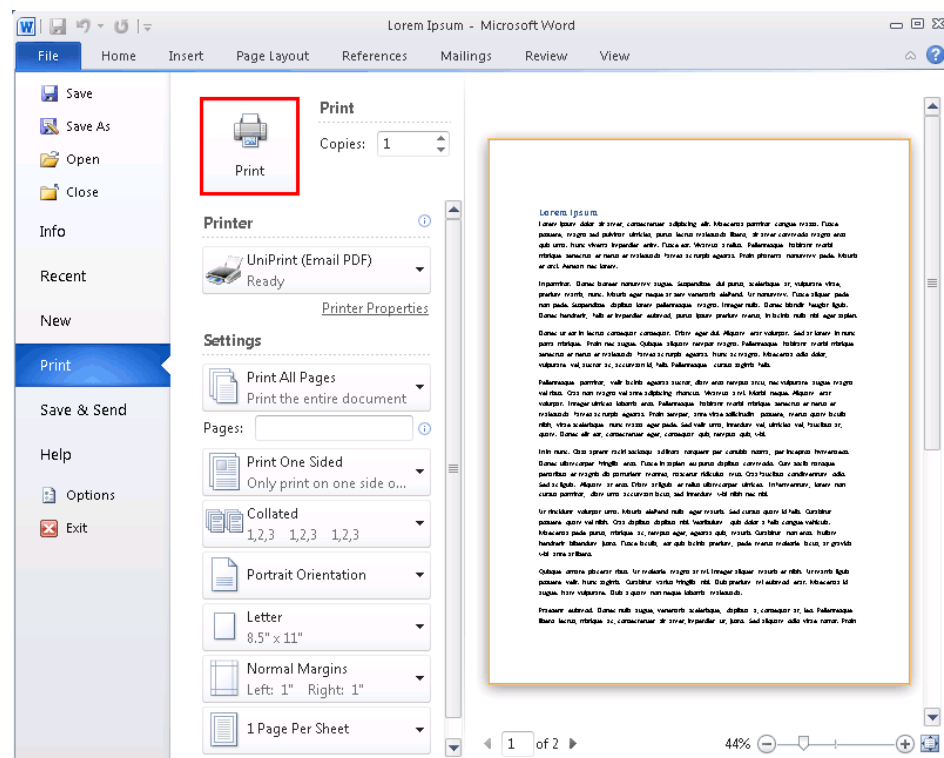
Owner Password and Permissions: The **Owner Password** allows the sender to restrict document features such as printing and editing.

If both types of passwords are set, then the secured PDF can be opened with either password, however, only the Owner Password will allow the user to change which features are restricted in the document.

Enable printing of document	If selected, the user is allowed to print the document.
Enable changing of document content	If selected, the user is allowed to change the contents of the PDF document.
Enable copying of text or graphics from the document	If selected, the user is allowed to copy parts of the text or graphics from the PDF document.
Enable adding notes or modifying form fields	If selected, the main content of the document cannot be changed, but the user add annotations and/or enter data in form fields.

11. After setting passwords and restrictions, click **OK**.

12. Click **Print**.



13. Type in the e-mail address(es) to which to send the printed document, the subject, a short message and your signature and then click **Send**.

Email

Send document via email

Please provide email settings for:
Microsoft Word - Lorem Ipsum

Message Details

To: dmorgan@mycompany.com

CC:

Subject: Microsoft Word - Lorem Ipsum

Message: Here's a copy of Lorem Ipsum. Please review and comment.
Thanks,

Signature: Jethro

Recipient addresses may be separated with a comma (,) or a semicolon (;)

Send Cancel

14. If PDF Security is enabled, the recipient of the e-mail will be prompted for a password when the attached PDF file is opened.

Password

! 'Lorem Ipsum.pdf' is protected. Please enter a Document Open Password.

Enter Password:

OK Cancel



NOTE: Some third-party products do not support or respect these security settings and document recipients may be able to bypass some or all of these settings.

Saving Printed Documents as PDF Files

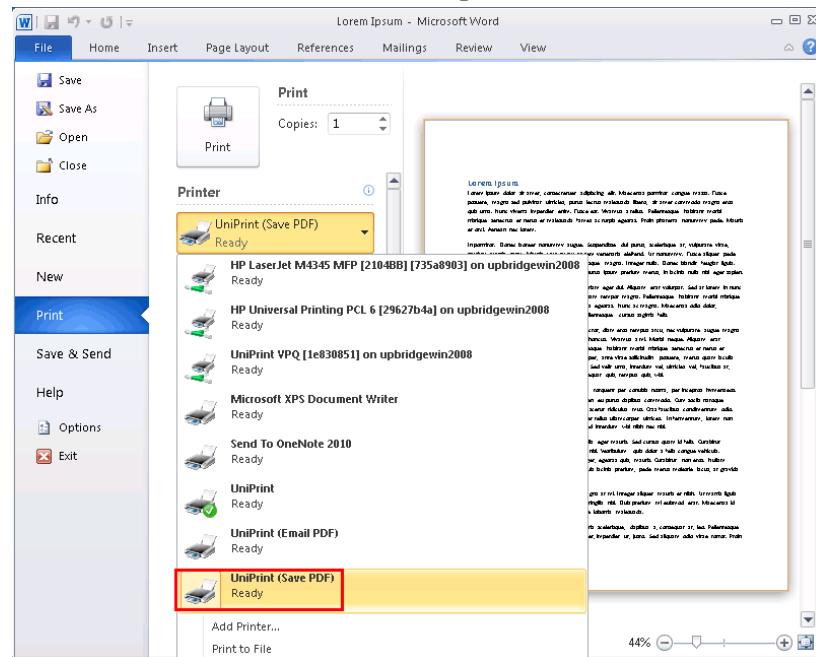
There are four ways to save your document as a PDF file in UniPrint and it depends on whether you have installed UniPrint Client on your workstations. The first method is by automatic print job archiving and does not involve any user interaction. For more information on print job archiving, see ["Configuring Print Job Archiving" on page 241](#). The second method is by setting the registry key ShowPreviewPDF to 1 which launches Adobe Reader on the UniPrint Application Server. For more information on configuring this features, see ["Using Adobe Reader to Preview PDF Print Jobs" on page 139](#). The third method is through the UniPrint Viewer which is outlined in the UniPrint Client User's Guide. The forth method is outlined below and is intended for those who don't have access to the UniPrint Client.

Before users can save their printed documents as PDF files, the **UniPrint (Save PDF)** queue must be enabled on the UniPrint Application Server through the UniPrint Management Console. To enable the **UniPrint (Save PDF)** queue, see ["Enabling UniPrint To Save Print Jobs As PDF Files" on page 118](#).

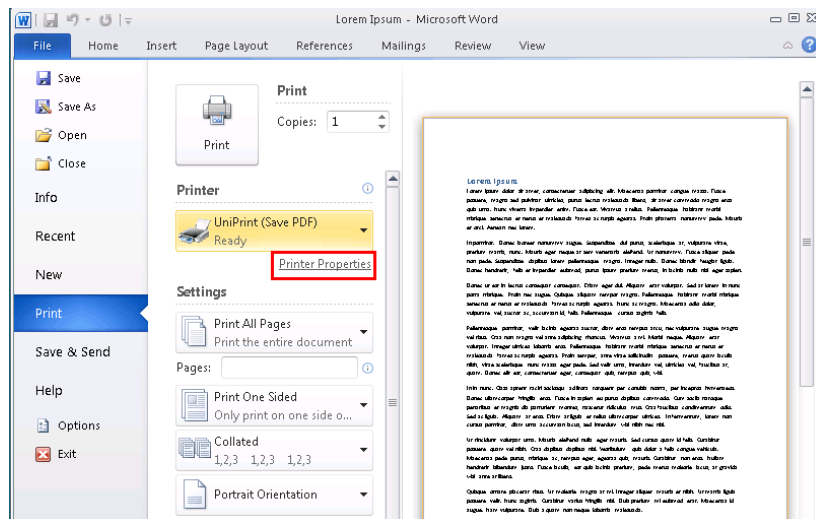
To save printed documents to a network accessible location, do the following:

1. Log onto the application server as you normally would through RDP or ICA to access applications.
2. Open an application from which to print, for example, Microsoft Word.
3. Print from the application.

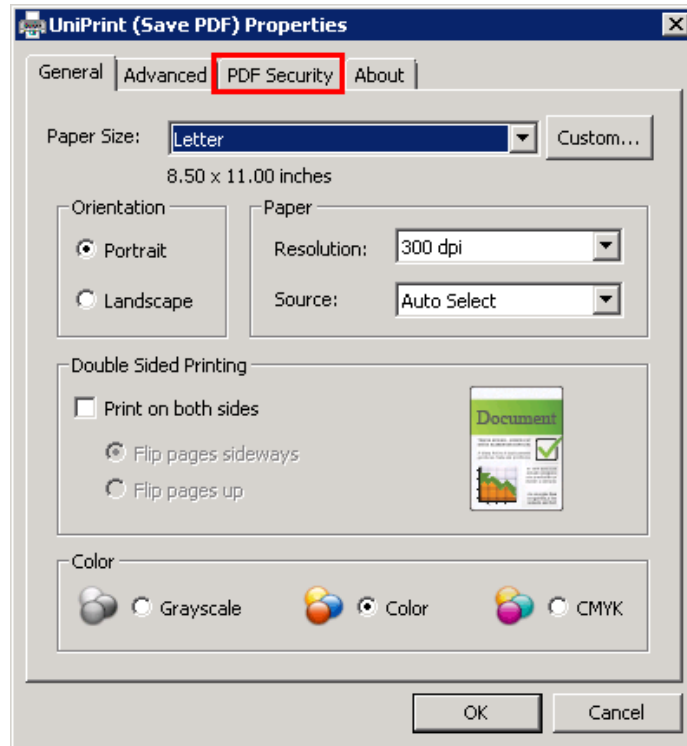
4. Select the **UniPrint (Save PDF)** printer.



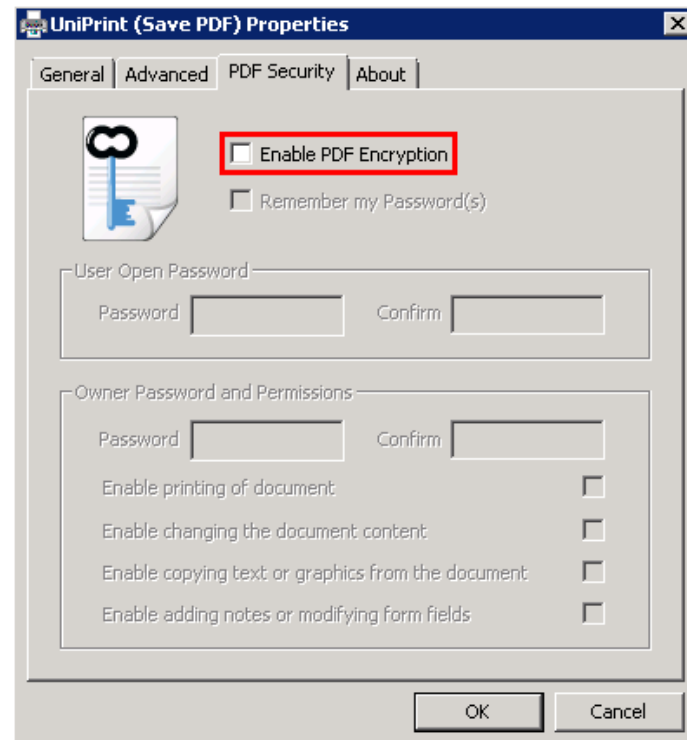
5. Click **Printer Properties**.



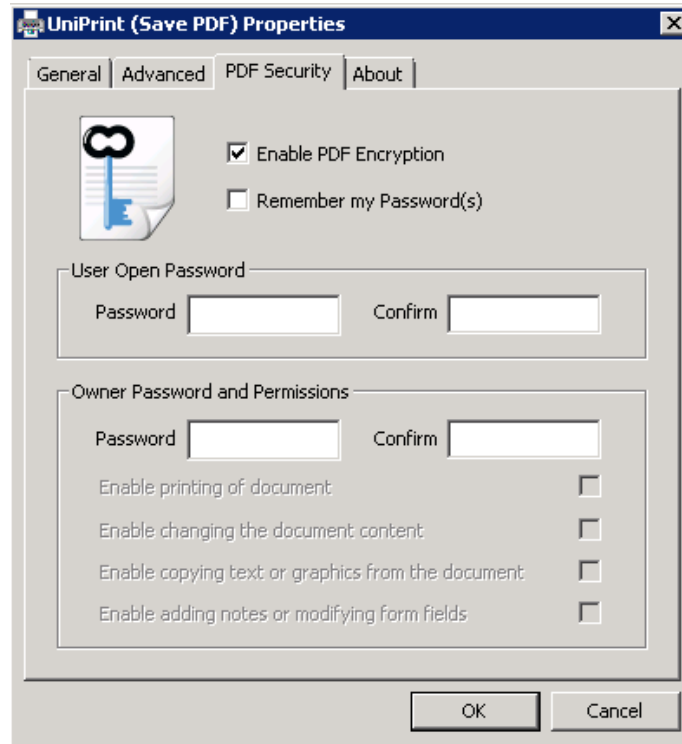
6. To apply password protection and/or to change feature restrictions of the created PDF file, click the **PDF Security** tab.



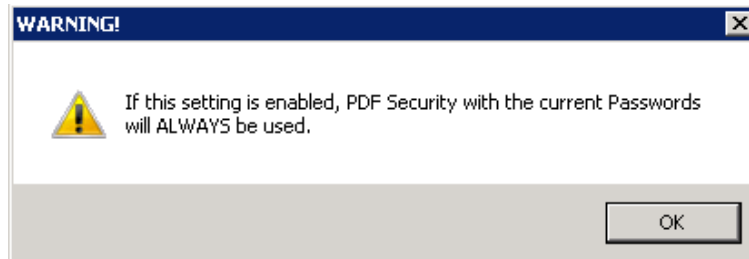
7. Select **Enable PDF Encryption**.



8. If you want your password(s) to remain persistent from session to session, select **Remember my Password(s)**.

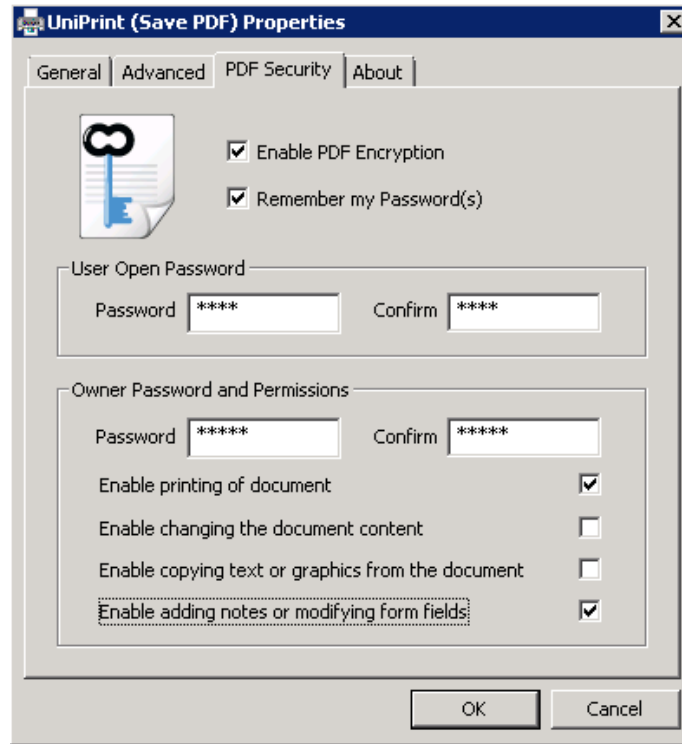


9. A message will appear warning you that a PDF security with the current password(s) will be used each and every time you print to the UniPrint (Save PDF) printer. Click **OK**.



BEST PRACTICE: If a password is forgotten, there is no way to recover the password from the PDF file. It is highly recommended that you keep a backup copy of the document that is not password protected.

10. There are two sets of passwords, the **User Open Password** and the **Owner Password**.



User Open Password: With the **User Open Password**, users must type in this password to open the PDF document in a PDF reader.

Owner Password and Permissions: The **Owner Password** allows the sender to restrict document features such as printing and editing.

If both types of passwords are set, then the secured PDF file can be opened with either password, however, only the Owner Password will allow the user to change which features are restricted in the document. The User Password and the Owner Password cannot be the same.

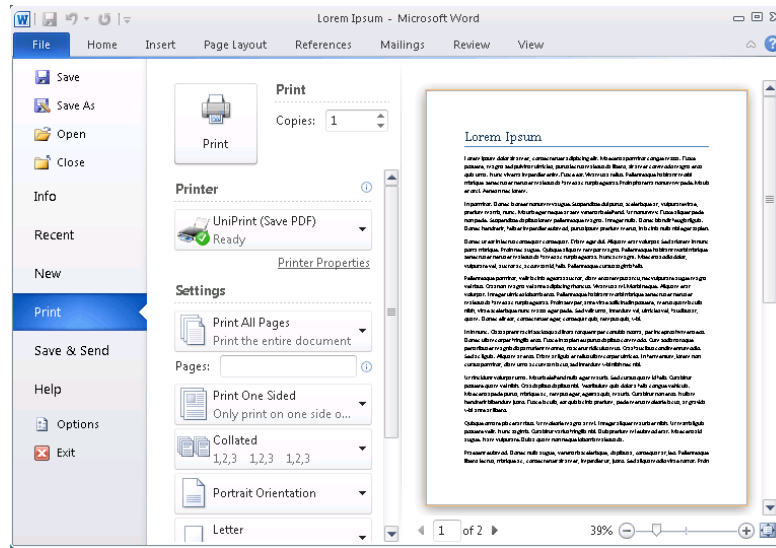
Enable printing of document	If selected, the user is allowed to print the document.
Enable changing of document content	If selected, the user is allowed to change the contents of the PDF document.
Enable copying of text or graphics from the document	If selected, the user is allowed to copy parts of the text or graphics from the PDF document.

Enable adding notes or modifying form fields

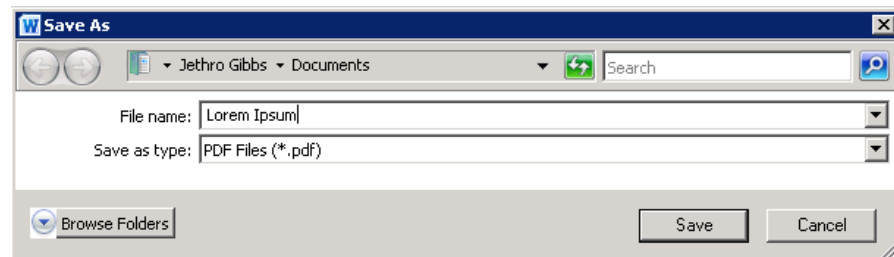
If selected, the main content of the document cannot be changed, but the user add annotations and/or enter data in form fields.

11. After setting the passwords and restrictions, click **OK**.

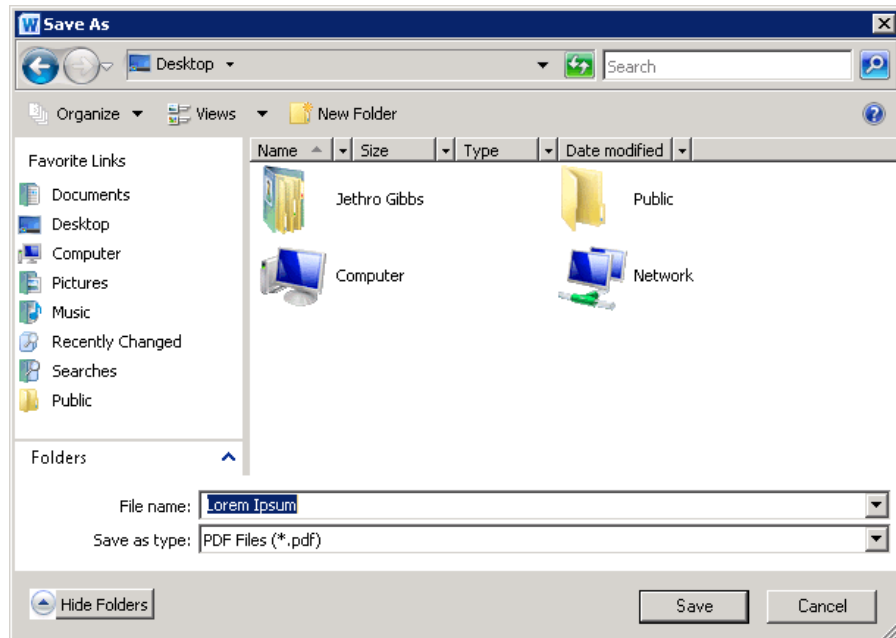
12. Click **Print**.



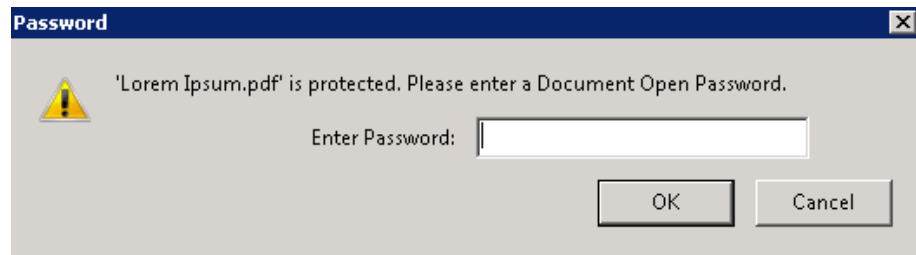
13. Enter a file name and then click **Browse Folders**.



14. Browse to a save location and then click **Save**.



15. If PDF Security is enabled, the user will be prompted for a password when the PDF file is opened.



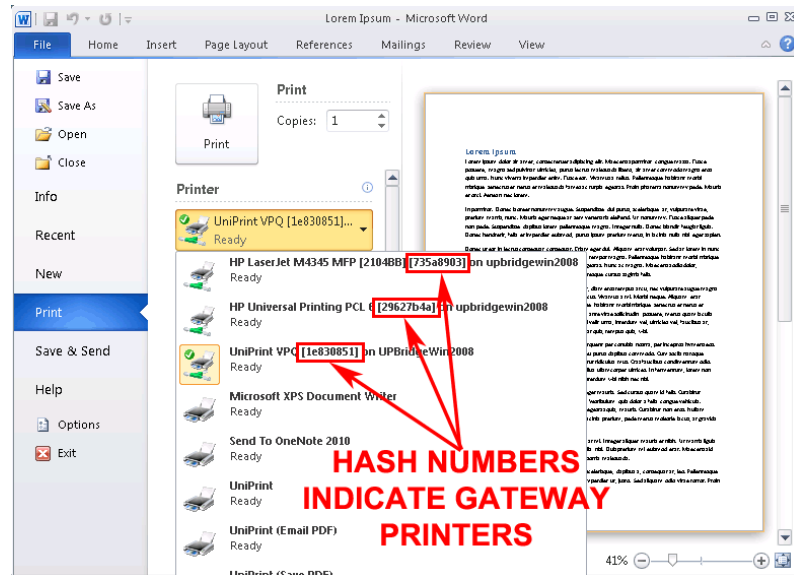
NOTE: Some third-party products do not support or respect these security settings and document recipients may be able to bypass these settings.

Using Printer Profiles to Print With Advanced Printer Properties

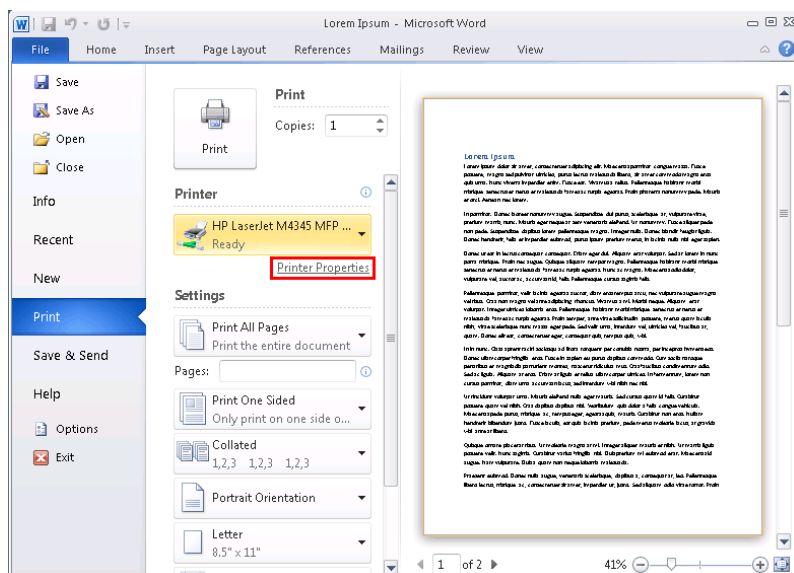
Printer profiles can be used to access and group together advanced printer properties like double-sided printing, stapling and hole punching since it uses the printer's native printer driver. They are also convenient since a user can select a combination of printer properties with just one click.

To print with a printer profile, do the following:

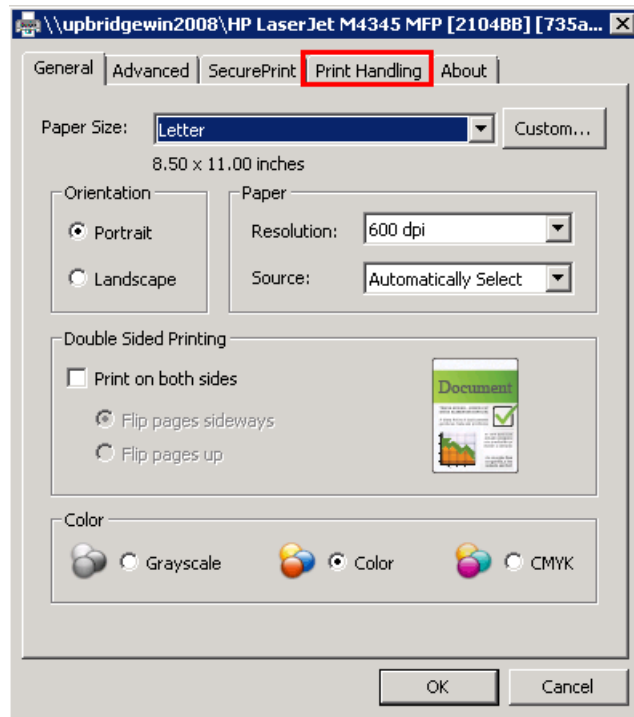
1. Log onto the application server as you normally would through RDP or ICA to access applications.
2. Open an application from which to print, for example, Microsoft Word.
3. Print from the application.
4. Select a Gateway printer to which to print.



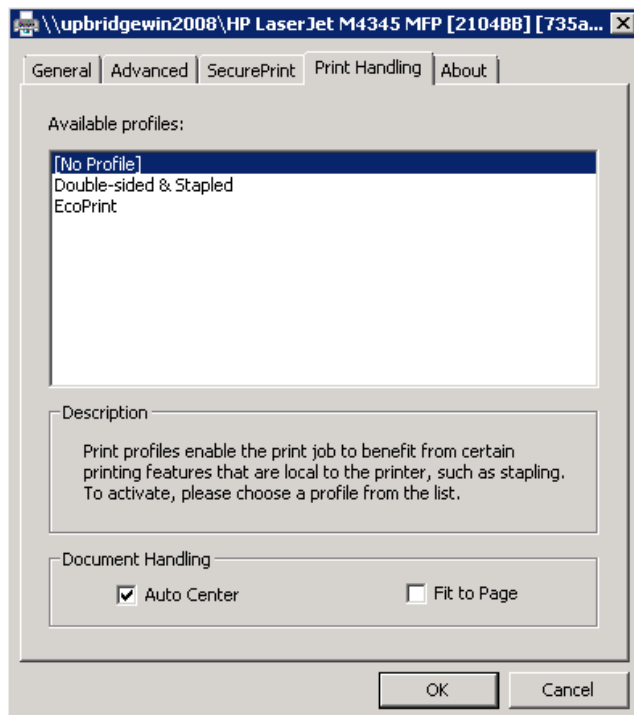
5. Click **Printer Properties**.



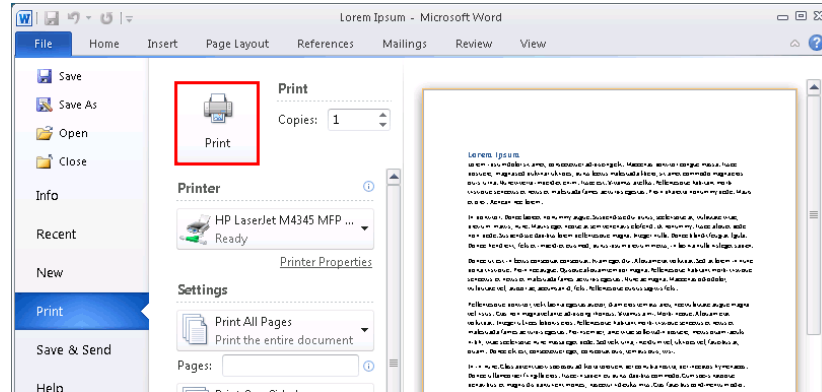
6. Click the **Print Handling** tab.



7. Click to select a profile and then click **OK**.



8. Click **Print** and the document will be printed according to the selected profile.



Printing from Adobe Acrobat or Reader to UniPrint


Documents that are already in PDF format need to be printed through the Adobe Plug-in. The Adobe Plug-in notifies UniPrint not to re-render the PDF which will result in substituted or missing fonts.

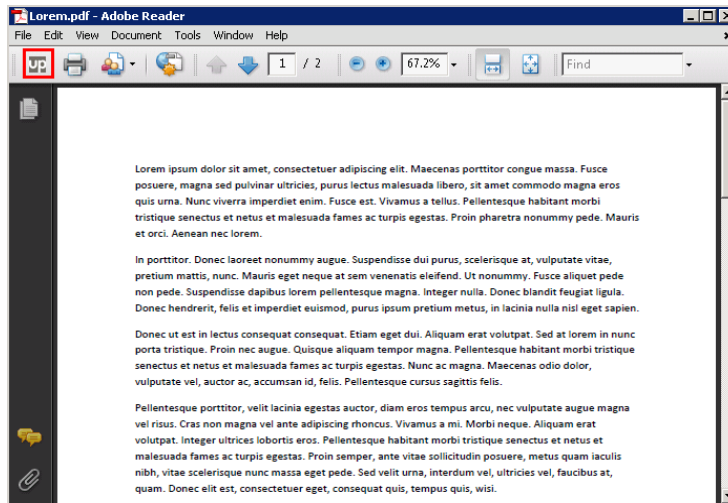
In Adobe Acrobat and Reader X and later, the interface has changed compared to earlier versions. Therefore, the Adobe Plug-in appears in different places depending on the version of Acrobat or Reader that is installed. Provided are two sets of instructions, one for Adobe Acrobat/Reader 9 and earlier and another for Adobe Acrobat/Reader X and later.

Printing from Adobe Acrobat or Reader 9 with the UniPrint Plug-in for Adobe

To print a file that is already in PDF format in Adobe Acrobat/Reader 9 or earlier, do the following:

1. Log onto the application server as you normally would through RDP or ICA to access applications.
2. Open the PDF document that you want to print.

- Click the UniPrint  icon or in the **File** menu, click **Print to UniPrint**.



- Select the desired printer and printer properties and then click **OK**.

Printing from Acrobat or Reader X or later with the UniPrint Plug-in for Adobe

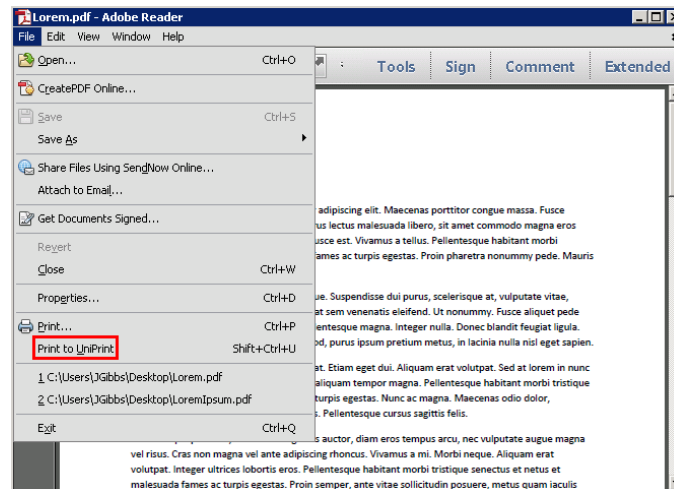


Prior to printing with the Adobe Plug-in, in Acrobat or Reader X, disable **Enable Protected Mode at startup** option. For detailed instructions, see ["Disabling Protected Mode at Startup in Adobe Reader X & XI" on page 135](#).

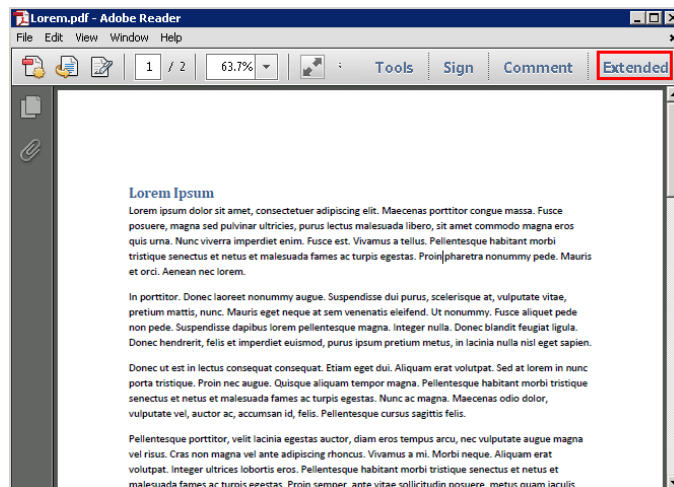
In Adobe Acrobat/Reader X and later, do the following:

- Log onto the application server as you normally would through RDP or ICA to access applications.
- Open the PDF document that you want to print.

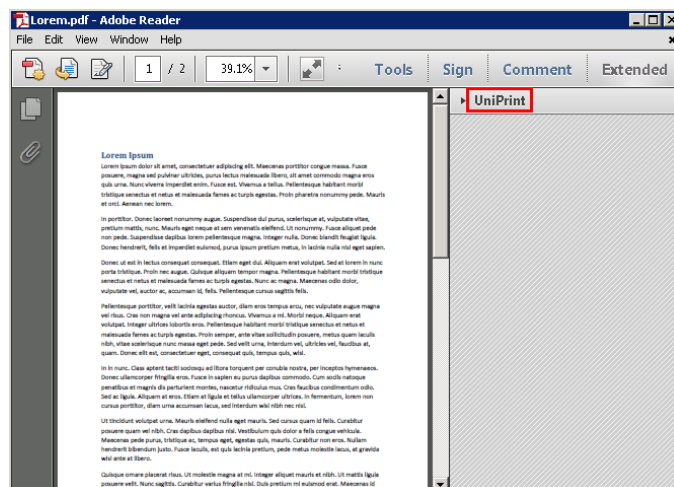
3. From the **File** menu, click **Print to UniPrint**.




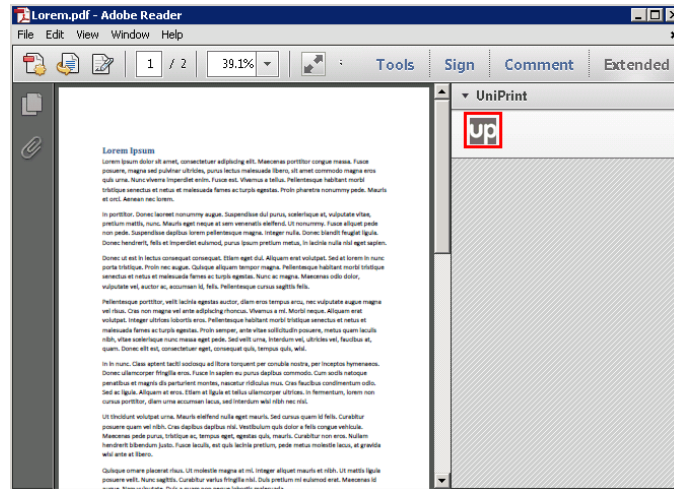
a) Or click **Extended**.



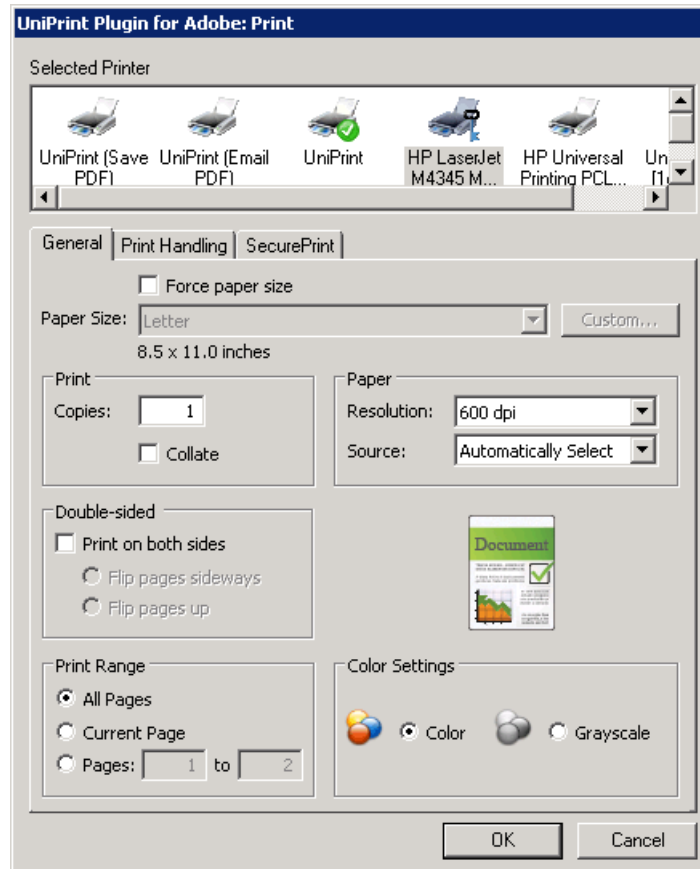
b) Click **UniPrint**.



- c) Click the UniPrint .



4. Select the desired printer and printer properties and then click **OK**.



UniPrint Support

Contact us if you require assistance with any of the UniPrint products.

North America**Hours of Operation**

06:00 to 19:00 Eastern Time (UTC -5)

Monday to Friday

Toll Free Phone Number (North America Only)

(866) 488-3188 option 3

Phone Number

(416) 503-9800 option 3

**Europe, Middle
East and Africa****Hours of Operation**

11:00 to 24:00 Coordinated Universal Time (Greenwich Mean Time)

Monday to Friday

Phone Number

(44) 0134 420 6144

E-mail support@uniprint.net

Office Location

Address

UniPrint.net
1 Eva Road, Suite 309
Toronto, ON M9C 4Z5
Canada

Phone Number

(416) 503-9800

Toll Free Phone Number (North America Only)

(866) 488-3188

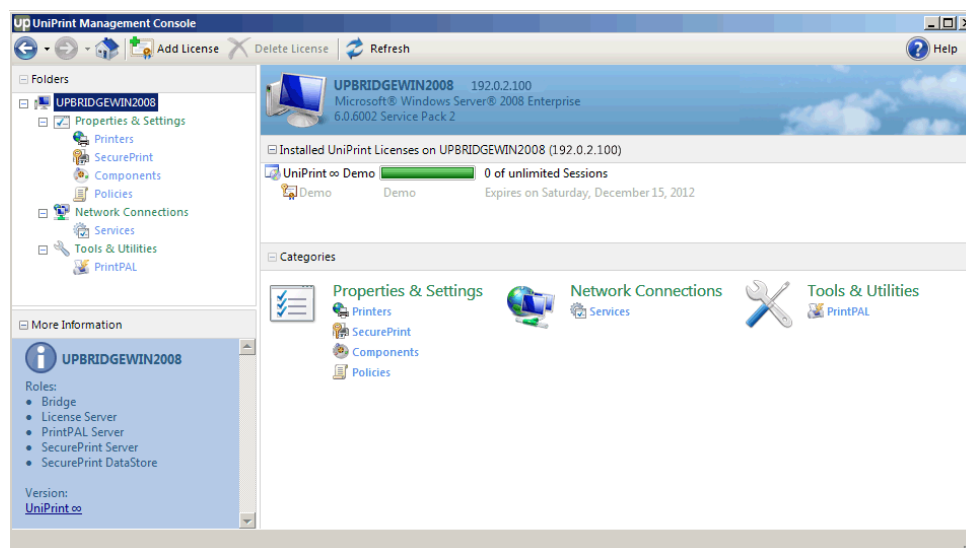
UniPrint Management Console Interface

The UniPrint Management Console is a container for configuration tools and utilities and is installed on each UniPrint component. This addendum describes all the available settings and options of the UniPrint Management Console. For the most part, the UniPrint Management Console is the same on each UniPrint component server, with three exceptions. Printer Profiles are only installed on the UniPrint Print Server. PrintPAL Server is installed on the UniPrint Bridge but is also accessible for configuration on the UniPrint Application Server. Sessions only applies to and is accessible from the UniPrint Application Server.

To start the UniPrint Management Console, on any UniPrint component server, do one of the following:

- Click **Start**, click **All Programs**, click **UniPrint Suite** and then click **UniPrint Management Console**. After the initial launch it will be pinned to your **Start** menu.
- Alternatively, the console (UPConsole.exe) can be launched from the application folder, for example, C:\Program Files\UniPrint Suite\Console.

Console Home



From the **Console Home** screen, the top banner displays information such as server name, IP address and operating system. You also have access to the license server and can add licenses or view real time license usage. Additionally, you can take a detailed snapshot of license usage.

Under **Properties & Settings**, you have access to the following settings:

Configuration Screen	Description
Printers	Use this screen to manage printers installed on both the UniPrint Bridge and on remote UniPrint Print Server(s).
SecurePrint	Use this screen to manage UniPrint vPad devices and their corresponding print queues.
Components	Use this screen to configure UniPrint component properties and to access debugging logs. The components displayed differ depending on which UniPrint component server is being accessed.
Policies	Use this screen to manage how Group Policy Objects affect UniPrint settings.

Under **Network Connections**, you have access to the following settings:

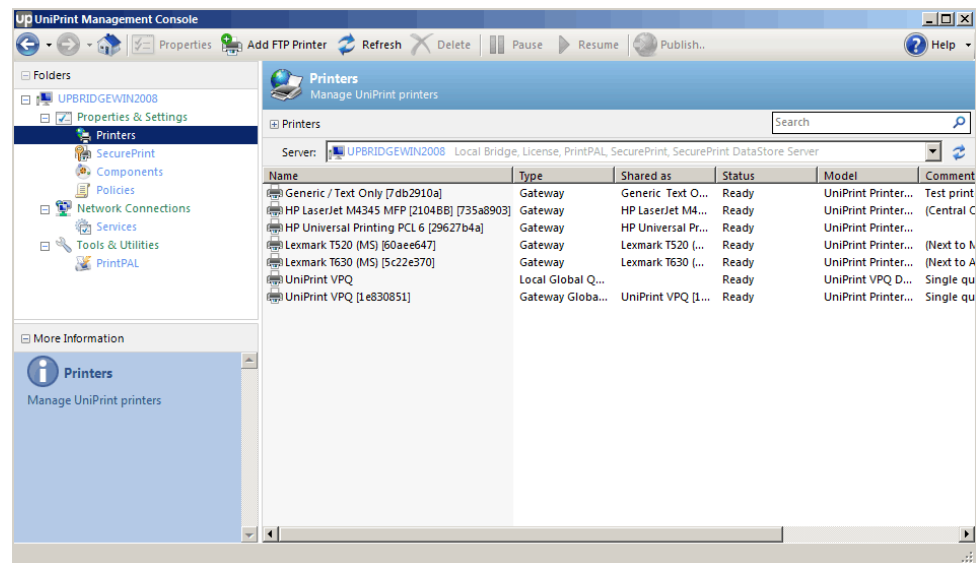
Configuration Screen	Description
Sessions	This screen is only accessible from the UniPrint Application Server. From this screen you can configure how UniPrint interacts with user sessions.
Services	From this screen you can configure local UniPrint services. The services displayed differ depending on which UniPrint component server is being accessed.

Under **Tools & Utilities**, you have access to the following:

Configuration Screen	Description
PrintPAL	This utility is only accessible from the UniPrint Bridge and UniPrint Application Server components and is used to manage session printer mappings.
Printer Profiles	This utility resides on the UniPrint Print Server and is used to access and group advanced printer properties such as stapling and hole punching.

Properties & Settings

Printers



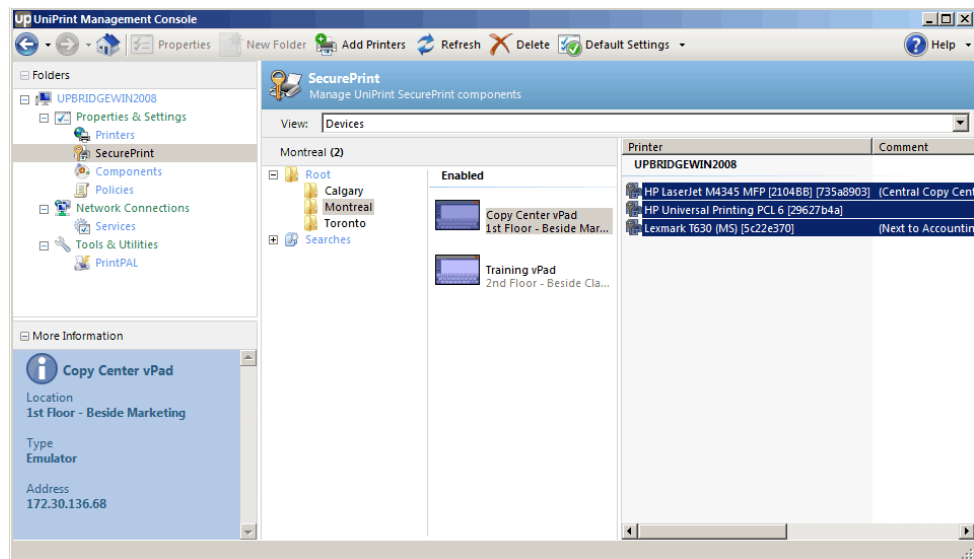
Printers is accessible from all UniPrint component servers, however different settings can be configured on different UniPrint components. To select a different UniPrint component server, beside **Server**, click the drop-down arrow and select a different server.

On the UniPrint Bridge, administrators have the ability to change the default Gateway printer properties, delete a Gateway printer, pause an available Gateway printer and create new FTP printer instances.

From the UniPrint Print Server, administrators can add new Gateway printers, publish them to the UniPrint Bridge, specify and change naming conventions for published Gateway printers, and manage Printer Profiles.

On the UniPrint Application Server, the UniPrint printer, UniPrint (Email PDF) and UniPrint (Save PDF) printer queues are displayed. To edit the properties of a UniPrint printer queue, click to select it and then click **Properties**.

SecurePrint



SecurePrint is accessible from all UniPrint component servers, but initial configuration should be done on the UniPrint Bridge. SecurePrint will auto-discover any vPad device that is attached to your network.

From this screen, you can enable vPad devices, change their properties and assign Gateway printers to them. If this UniPrint component server is also your SecurePrint Data Store, you can also set vPad properties globally for all devices, by clicking **Default Settings**.

A list of users and their corresponding smart card ID numbers can also be imported and registered through this screen.

Default Settings

Default Settings

Defaults

Devices

Allow user self-registration	Yes
Device Mode	Normal
Home page	New search
Home page: Auto show	Yes
Home page: Auto show time	15 seconds
Language	English
Printer display name	Original name
Recently searched list maximum	10
Screen: Auto adjust backlight	Yes
Screen: Brightness %	100
Screen: Dim after	5 minutes
Screen: Turn off after	60 minutes
ScreenSaver: Activated	No
ScreenSaver: Interval	10
ScreenSaver: Theme	Blank
Show settings on vPad devices	Yes
Sort print jobs	Yes
Sounds:	No
Sounds: Volume	50
Use Integrated Windows printer security	No

Jobs

Cached jobs count	2
Cached jobs expire	Yes
Cached jobs expire after	14400
Cached jobs expiry check	60
Unclaimed jobs expire	No
Unclaimed jobs expire after	1440
Unclaimed jobs expiry check	60

Passwords

Require vPad password	No
-----------------------	----

Show settings on vPad devices
Sets whether the Settings screen can be accessed from a vPad device.

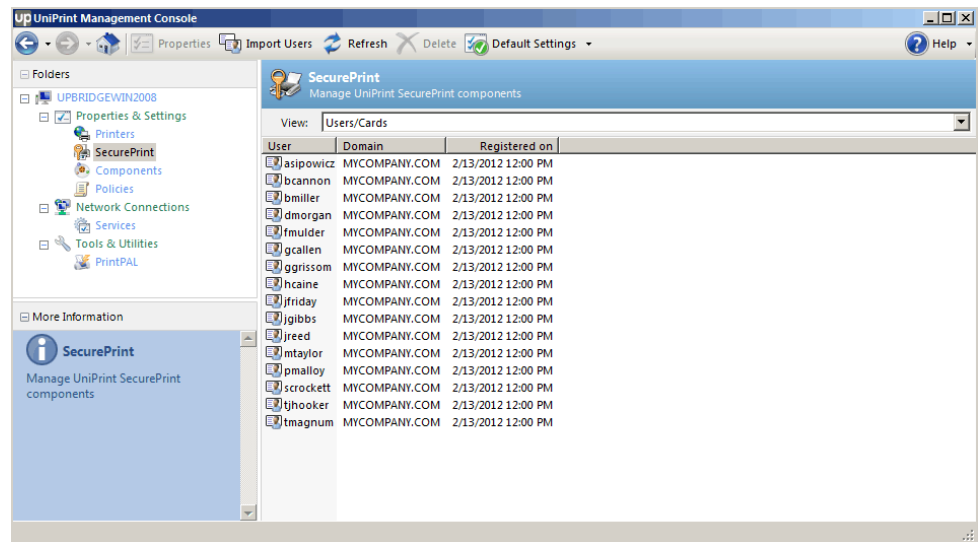
Setting	Description
Allow user self-registration	If set to Yes , after the user submits a print job with a password, the user can then register their contact-less proximity smart card or a contact smart card with a magnetic strip through the vPad device in order to associate their user name to their smart card.

Setting	Description
Device Mode	Sets how users can retrieve print jobs from the vPad device. The options are Normal and Locked down. If set to Locked down , the device will be unresponsive to touch until a valid smart card or magnetic strip is used.
Home page	If set to NewSearch , users will be required to enter their user name in order to display their print jobs. If set to RecentUserList , users can scroll and select from a list of users who recently sent a print job, but have not retrieved it. NewSearch is the default Home page.
Home page: Auto show	If set to Yes , the default Home page will be displayed after a period of inactivity.
Home page: Auto show time	Sets the amount of time the vPad needs to be inactive before the screen changes to the default Home page. Available options are 15 seconds, 30 seconds, 1 minute, 2 minutes, and 5 minutes.
Language	English, French, German, Italian, Polish and simplified Chinese interfaces are now available.
Printer display name	Sets how printer names are displayed on the vPad. Available options are Original name and UniPrint Gateway name.
Recently searched list maximum	Sets the maximum number of user names displayed in the recently searched list.
Screen: Auto adjust backlight	If set to Yes , the screen will dim and then turn off automatically after a set amount of inactive time.
Screen: Brightness%	Sets the percentage of brightness. The default is 100%.
Screen: Dim after	The vPad screen will dim, if it is inactive for the amount of time set here. Available options are 30 seconds, 1 minute, 2 minutes, 5 minutes, 10 minutes and 20 minutes.

Setting	Description
Screen: Turn off after	The vPad screen will turn off, if it is inactive for the amount of time set here. Available options are 5, 10, 15, 20, 30, and 60 minutes.
ScreenSaver: Activated	If set to Yes , a screensaver will run on the vPad after a period of inactivity.
ScreenSaver: Interval	A screensaver will activate, if the vPad is inactive for the amount of time set here in seconds.
ScreenSaver: Theme	The theme can either be set Blank in which the screen turns off or to Fading where the UniPrint logo floats in different directions on the screen.
Server Connection: Static address:port	The static IP address and port number for the print server to which the vPad is connected can be added. Note: <i>The port number must be included.</i>
Show settings on vPad devices	If set to Yes , the Settings icon and screen will be available on the vPad device and any user can change its settings.
Sort print jobs	Print jobs can either be displayed with the oldest first or the newest first.
Sounds	Tap sounds can be enabled or disabled.
Sounds: Volume	The volume can be set between 0 and 100%. The default is 50%.
Use Integrated Windows printer security	If set to Yes , SecurePrint will check Group Policies and display only the printers to which the user has access.
Cached jobs count	Sets the number of print jobs per user to keep cached in history. Default is 2.
Cached jobs expire	Sets whether cached jobs expire. If set to Yes , cached jobs will expire after the time set in Cached jobs expire after . If set to No , cached jobs never expire and will remain in the cached history until they are manually removed. Default is Yes .

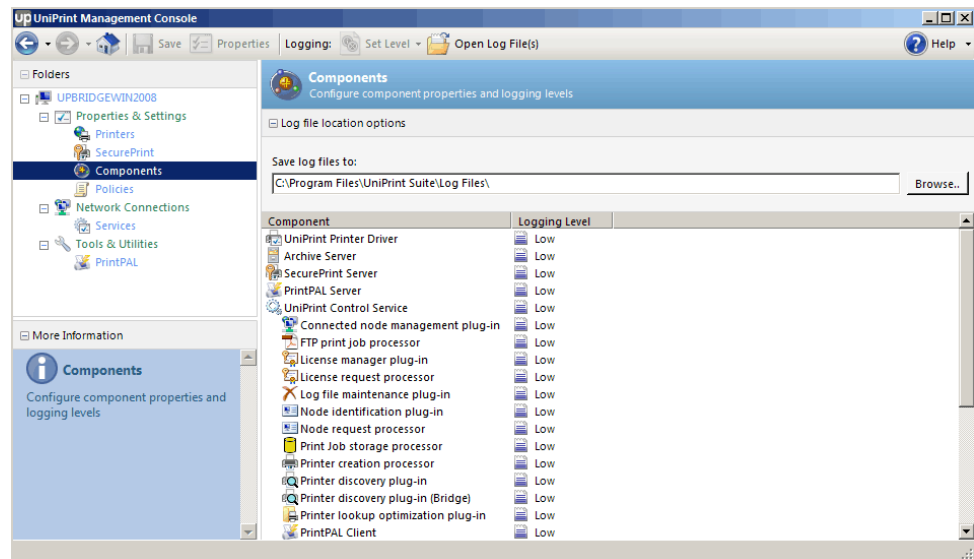
Setting	Description
Cached jobs expire after	Sets how long (in minutes) cached jobs are kept. Default is 14400 minutes (10 days).
Cached jobs expiry check	Sets how frequently (in minutes) the system checks for expired cached jobs. Default is 60 minutes.
Unclaimed jobs expire	Sets whether unclaimed jobs expire. If set to Yes , unclaimed jobs will be deleted after the time set in Unclaimed jobs expire after . If set to No , unclaimed jobs never expire and will remain in queue until they are manually deleted. Default is No .
Unclaimed jobs expire after	Sets how long (in minutes) unclaimed jobs are kept. Default is 1440 minutes (24 hours).
Unclaimed jobs expiry check	Sets how frequently (in minutes) the system checks for unclaimed jobs. Default is 60 minutes.
Require vPad password	If set to Yes , the user will be required to set and enter a password in order to release their print job.
Require VPQ password	If set to Yes , whenever the user prints to the UniPrint VPQ (virtual print queue), the user will be required to set and enter a password in order to release their print job.
Allow password bypass at device	This is for valid smart card, RFID or HID users. If set to Yes , only the smart card, RFID or HID is required for authentication and release of print jobs. If set to No , using the smart card, RFID or HID will only display the user's list of print jobs. However, the user will still be required to enter a password in order to release a print job.
User card limit	Sets the number of contactless/contact smart cards that can be associated to each user name.

Users/Cards View



By selecting **Users/Cards** from the **View** list, a list of users and their corresponding card numbers can be added and registered to the SecurePrint Data Store. Importing users prevents users from having to physically register their card on a vPad device.

Components



The Components screen is where you access UniPrint component properties. All components have debugging properties, while some components have additional properties beyond debugging.

Debugging capability is implemented on all UniPrint component servers to provide additional information for troubleshooting.

Four logging levels are available: **None**, **Low**, **Medium** and **High**. To change the debug level of a component, do one of the following:

- Click to select the component, click **Set Level** and then click the desired log level.
- Right-click a component and then click the desired log level.

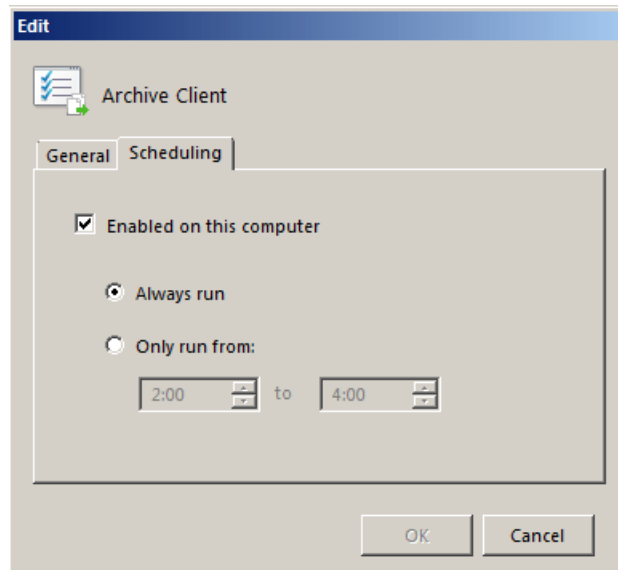
Most log files are created in \\Program Files\\UniPrint Suite\\Log Files and can be viewed by clicking on **Open Log File(s)**.

To change component settings, click to select a component and then click **Properties** or right-click a component and then click **Properties**.

Different components reside on different UniPrint component servers. All components are described below.

UniPrint Printer Driver	This component resides on the UniPrint Bridge and on the UniPrint Application Server. If enabled, a log file UP_Driver_%timestamp%.log is created in the user's temp\\Low directory, for example, C:\\Users\\DMorgan\\AppData\\Local\\Temp\\Low. Only the Log Level can be edited.
SecurePrint Server	<p>This component resides on the UniPrint Bridge and is responsible for managing and accepting requests for vPad devices and virtual print queues.</p> <p>If enabled, a log file, UPSPSvr_%timestamp%.log is created. This information can be used to troubleshoot connection issues between the vPad devices and the virtual print queues.</p>
PrintPAL Server	<p>This component resides on the UniPrint Bridge and is responsible for mapping printers to user sessions based on a combination of network administrator-defined settings and user preferences.</p> <p>If enabled, a log file, UPPPSvr_%timestamp%.log is created. This information can be used to troubleshoot mapping issues with PrintPAL.</p>
UniPrint Session Application	<p>This component resides on the UniPrint Application Server. Only the Log Level can be edited.</p> <p>If enabled, a log file Logscript-%userid%-SID2_%timestamp%.log is created in the user's temp directory. From the user's session, the log file Logscript-%userid%-SID2_%timestamp%.log can be viewed at C:\\Users\\%UserID%\\AppData\\Local\\Temp.</p>

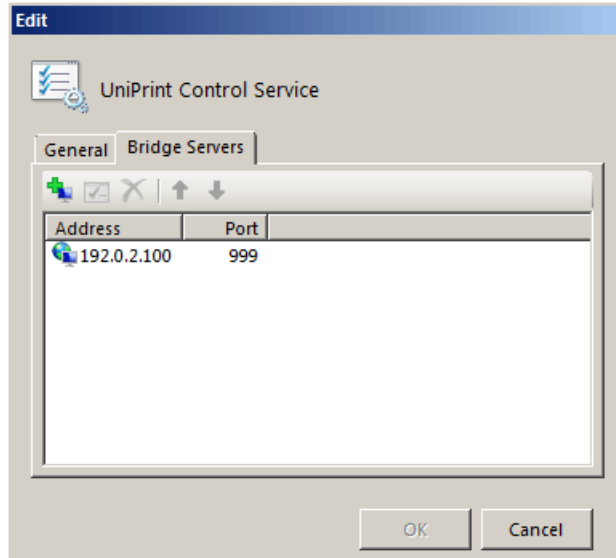
Archive Client This component resides on the component where print jobs are captured for archiving. If print jobs from the UniPrint queues are to be archived, then the Archive Client should reside on the same server as the UniPrint Application Server. If print jobs from Gateway printer queues are to be archived, then the Archive Client should reside on the same server as the UniPrint Print Server. This component is responsible for capturing and routing PDF print jobs to the Archive Server. The archiving can be turned on or off and archiving can be scheduled to occur only during a specified time of day. The log level can also be changed.



If enabled, a log file, UPArchClientSvc_%timestamp%.log is created and can be used to troubleshoot print job archiving issues.

UniPrint Control Service This component resides on all UniPrint component servers and maintains information exchange connections with UniPrint routing servers and controls execution of UniPrint plug-ins and on-demand processors. You can edit the

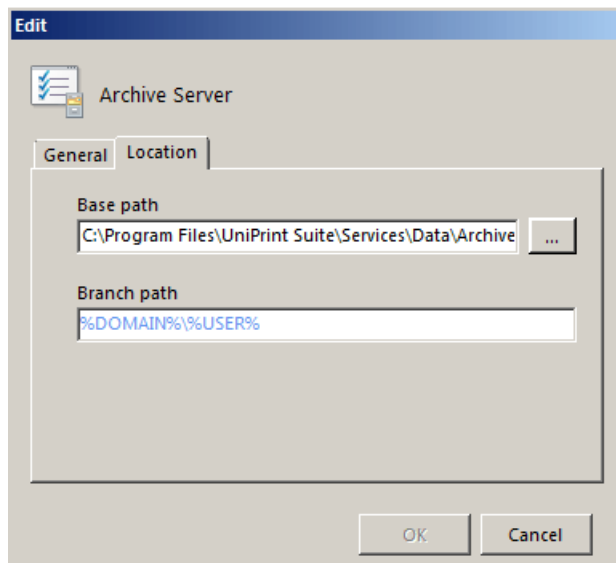
Port, Log Level and add, edit or delete a Bridge connection. The default port is 998.



If enabled, a log file, UPCtlSvc_%timestamp%.log is created. This information can be used to troubleshoot connectivity issues with the UniPrint Bridge.

Archive Server

This component resides on the server machine where print jobs are to be archived. It can also reside on any other UniPrint component, for example, the UniPrint Bridge, as long as it points to different network accessible location. The Archive Server is responsible for managing and routing a copy of all print jobs received from the Archive Client. The Log Level and the archive location can be set.



If enabled, a log file, UPCtlSvc_%timestamp%.log is created. This information can be used to troubleshoot connection and routing issues between the Archive Client and the archive location.

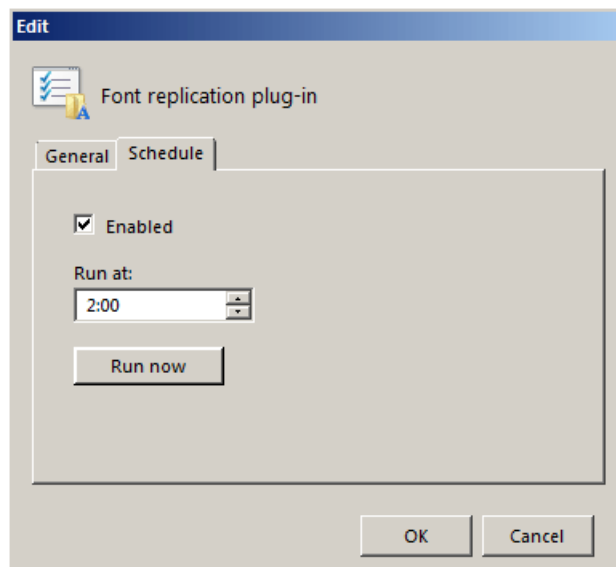
Connected node management plug-in

This component resides on the UniPrint Bridge and manages the presence of active UniPrint nodes and services node-related requests. Only the Port and Log Level settings can be edited. The default port is 25469.

If enabled, a log file UPCtlSvc_%timestamp%.log is created. This information can be used to troubleshoot active nodes and services.

Font replication plug-in

This component resides on the UniPrint Print Server and manages font availability by requesting fonts from UniPrint Application Server(s) once daily at the scheduled time. Font replication eliminates the occasional need to embed fonts when printing through UniPrint. The Log Level and replication schedule can be set.



If enabled, a log file, UPCtlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding font replication on the UniPrint Print Server.

Font request processor

This component resides on the UniPrint Application Server. It marshals and completes font list and font requests from remote print servers. Only the Log Level can be edited.

If enabled, a log file, UPCtlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding font replication.

FTP print job processor

This component resides on the UniPrint Bridge and enables printing directly to FTP-enabled printers. Only the Log Level can be edited.

If enabled, a log file, UPCtlSvc_%timestamp%.log is created. This information can be used to troubleshoot Lexmark/HP FTP printer connections.

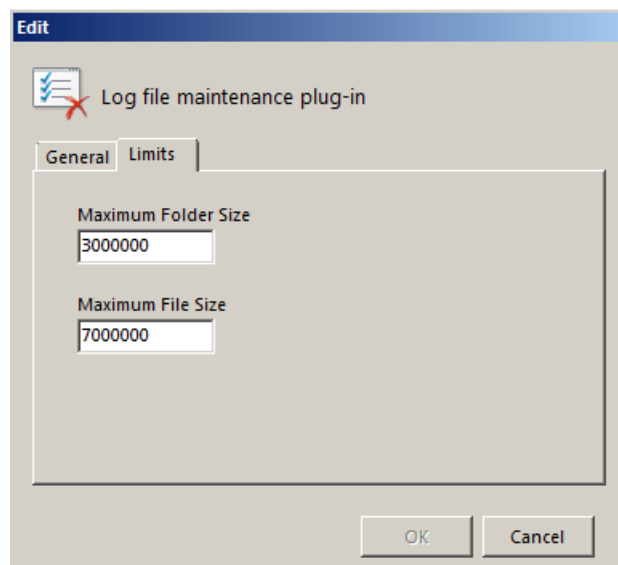
License manager plug-in This component resides on the UniPrint Bridge and is responsible for active license administration and distribution. Only the Port and Log Level can be edited. The default port is 25467.

If enabled, a log file, UPCtlSvc_%timestamp%.log is created. This information can be used to troubleshoot license management issues.

License request processor This component resides on the UniPrint Bridge and marshals license requests from remote servers and relays these requests to the license manager plug-in. Only the Log Level can be edited.

If enabled, a log file, UPCtlSvc_%timestamp%.log is created. This information can be used to troubleshoot license requests from remote application servers.

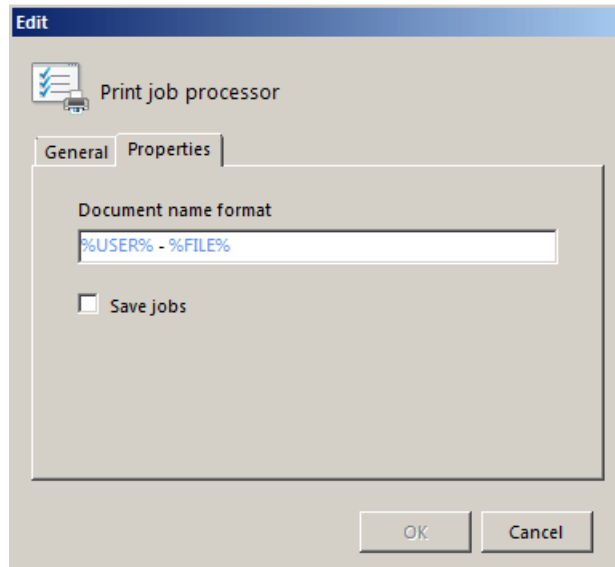
Log file maintenance plug-in This component resides on all UniPrint component servers and enables the application of user-defined values to prevent the UniPrint logging structure from exceeding applied thresholds. The Log Level can be edited to provide greater detail and the limits for Maximum Folder Size and Maximum File Size, both in bytes, can be modified to better suit available server resources.



If enabled, a log file, UPCtlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding log file thresholds and clean up.

Node identification plug-in	<p>This component resides on all UniPrint component servers and serves to identify itself on the UniPrint node network. Only the Log Level can be edited.</p> <p>If enabled, a log file, <code>UPCtlSvc_%timestamp%.log</code> is created. This information can be used to troubleshoot issues regarding local node identification.</p>
Node request processor	<p>This component resides on the UniPrint Bridge and marshals connected node requests from remote servers and relays these requests to the Node identification plug-in. Only the Log Level can be edited.</p> <p>If enabled, a log file, <code>UPCtlSvc_%timestamp%.log</code> is created. This information can be used to troubleshoot issues regarding remote node requests.</p>
Print Job storage processor	<p>This component resides on the UniPrint Bridge and accepts print jobs designated for SecurePrint and/or the UniPrint VPQ. It is also responsible for submitting print job information to the SecurePrint Data Store.</p> <p>If enabled, a log file, <code>UPCtlSvc_%timestamp%.log</code> is created. This information can be used to troubleshoot issues regarding printing to SecurePrint and the UniPrint VPQ.</p>
Print job processor	<p>This component resides on the UniPrint Print Server and accepts print jobs from servers and relays information to the UniPrint rendering engine. It is also responsible for monitoring and reporting print job status back to the originating server. The Log Level and Port number can be edited and print jobs can be set to be saved with a specified naming convention. The default port is 10206 and naming convention is <code>%USER%-%FILE%</code> which are placeholders for user name and file name. The naming convention refers to the print job name displayed in the print queue. If the Save jobs option is</p>

enabled, print jobs are saved on the UniPrint Print Server in \\Program Files\\UniPrint Suite\\Services\\Data\\PrintJob.



If enabled, a log file, UPCTlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding print job monitoring and reporting.

**Printer creation
processor**

This component resides on the UniPrint Bridge and handles the creation and maintenance of UniPrint Gateway queues from remote print servers. Only the Log Level can be edited.

If enabled, a log file, UPCTlSvc_%timestamp%.log is created. This information can be used to troubleshoot printer replication from a connecting UniPrint Print Server.

**Printer discovery
plug-in**

This component resides on both the UniPrint Bridge and the UniPrint Print Server and monitors local print server printers and relays changes to the

UniPrint Bridge. The Log Level can be edited to provide greater detail and publishing naming formats can be rearranged as desired.

Edit

Printer discovery plug-in

General | **Name Formats**

Name

Share name

Comment

Location

OK Cancel

If enabled, a log file, UPCTlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding print server printer monitoring.

Printer discovery plug-in (Bridge)

This component resides on the UniPrint Bridge and monitors local Bridge printers and relays changes to client sessions. Only the Log Level can be edited.

If enabled, a log file, UPCTlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding the VPQ.

Printer lookup optimization plug-in

This component resides on both the UniPrint Bridge and the UniPrint Print Server and is responsible for internal list generation and maintenance of available printers. It optimizes performance since the list can be used to look up printers before enumerating the Windows spooler.

If enabled, a log file, UPCTlSvc_%timestamp%.log is created. This information can be used to troubleshoot printer unavailability issues.

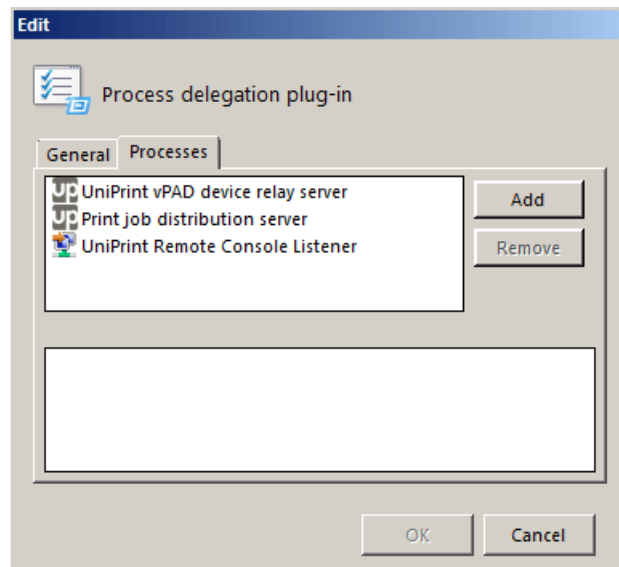
PrintPAL Server Relay

This component resides on the UniPrint Bridge and marshals PrintPAL Client requests from remote servers and relays these to the PrintPAL Server for user printer data acquisition. Only the Log Level can be edited.

If enabled, a log file, UPCTlSvc_%timestamp%.log is created. This information can be used to troubleshoot mapping issues with PrintPAL.

Process delegation plug-in

This component resides on all UniPrint component servers and starts and monitors UniPrint-related processes. The Log Level can be edited and processes can be added or removed.



If enabled, a log file, UPCTlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding UniPrint-related processes.

Profile discovery plug-in

This component resides on the UniPrint Print Server and is responsible for monitoring print profile activity and synchronizing profile changes with the UniPrint Data Store. This component is only used in environments with UniPrint vPad devices. Only the log level can be changed.

If enabled, a log file, UPCTlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues with detecting profiles on the UniPrint Print Server.

Quorum synchronization plug-in

This component resides on both the UniPrint Bridge and the UniPrint Print Server and maintains synchronization of cluster quorum files with locally stored UniPrint configuration data.

If enabled, a log file, UPCTlSvc_%timestamp%.log is created. This information is only relevant for failover clusters and can be used to troubleshoot issues regarding quorum path availability.

Remote Console query processor

This component resides on all UniPrint component servers and enables the UniPrint Management Console to process commands initiated from remote system nodes. Only the Log Level can be edited.

If enabled, a log file, UPctlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding command processing from remote UniPrint component servers.

SecurePrint Job processor

This component resides on the UniPrint Print Server and accepts print jobs from the SecurePrint & VPQ Servers and relays information to the UniPrint rendering engine. Only the Log Level can be edited.

If enabled, a log file, UPPrintJobSvr_%timestamp%.log is created. This information can be used to troubleshoot issues regarding SecurePrint printing.

UniPrint Bridge 64-bit layer plug-in

This component resides on the UniPrint Bridge and provides compatibility for 32-bit to 64-bit printing. Only the Log Level can be edited.

If enabled, a log file, UPctlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding the Windows-On-Windows support layer.

UniPrint Bridge service discovery plug-in

This component resides on the UniPrint Bridge and is responsible for responding to UniPrint Bridge IP discovery requests. Only the Log Level can be edited.

If enabled, a log file, UPctlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding Bridge IP requests from remote servers.

UniPrint Data Server

This component resides on the UniPrint Bridge and manages information exchange between SecurePrint & VPQ subsystem and the vPad devices. It also acts as a SecurePrint database access layer. The Log Level and Port number can be edited. The default port number is 10209.

If enabled, a log file, UPctlSvc_%timestamp%.log is created. The information can be used to troubleshoot connection issues between SecurePrint/VPQ and vPad devices.

UniPrint driver install plug-in

This component resides on the UniPrint Bridge and the UniPrint Application Server and installs the UniPrint printer driver. Only the Log Level can be edited.

If enabled, a log file, UPctlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding driver and port installation and removal.

UniPrint vPad device relay server

This component resides on the UniPrint Print Server and relays information to and from vPad devices. It also acts as a conduit to the SecurePrint database layer. The Log Level and Port number can be edited. The default port number is 10208.

If enabled, a log file, UPDeviceRelaySvr_%timestamp%.log is created. This information can be used to troubleshoot connection issues between the Print Server and the associated vPad device.

**UniPrint printer
install plug-in**

This component resides on both the UniPrint Bridge and the UniPrint Application Server and installs the UniPrint printer, port and port monitor. Only the Log Level can be edited.

If enabled, a log file UPCtlSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding the UniPrint printer installation.

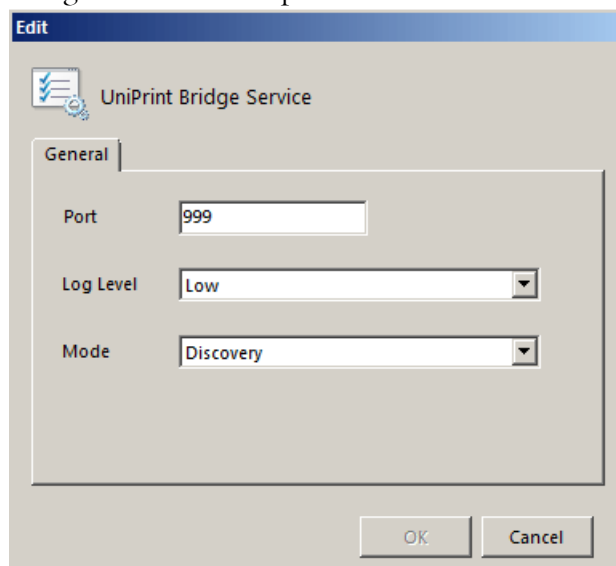
**UniPrint
SecurePrint &
VPQ server**

This component resides on the UniPrint Bridge and manages print job information and data between the SecurePrint & VPQ subsystem and the vPad devices. It also acts as a SecurePrint database access layer. Only the port number and log level can be edited. The default port is 10207.

If enabled, a log file, UPDeviceSvr_%timestamp%.log is created. This information can be used to troubleshoot connection and information transfer issues between the SecurePrint Server and the vPad devices.

**UniPrint Bridge
Service**

This component resides on the UniPrint Bridge and acts as an information router between UniPrint nodes. It also authenticates and manages connections between UniPrint Control Services. The Port, Log Level and Mode can be changed. The default port is 999.



If enabled, a log file UPSplSvc_%timestamp%.log is created. This information can be used to troubleshoot issues regarding incoming connections from other UniPrint nodes.

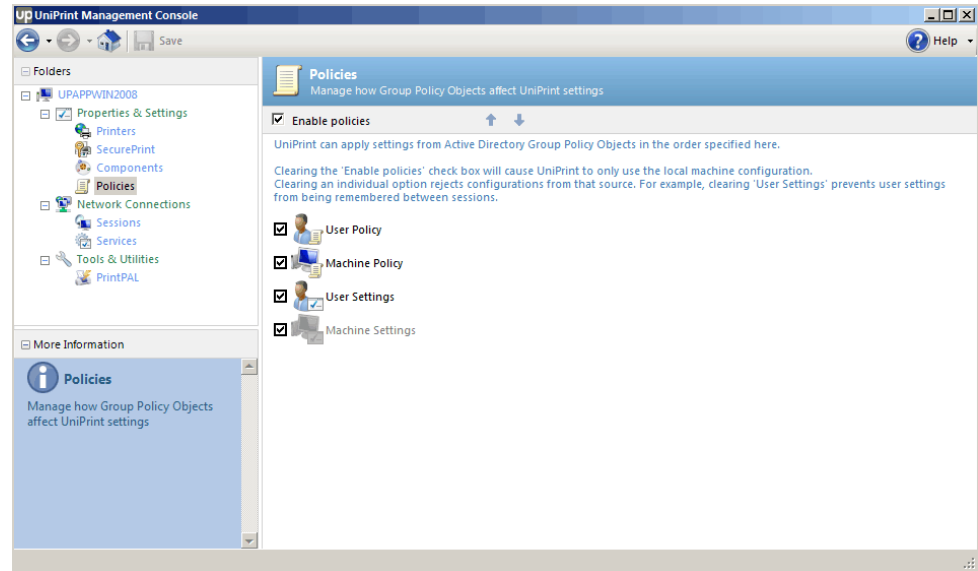
Discovery mode

Allows any UniPrint Print Server or UniPrint Application Server to become a subscriber of the UniPrint domain.

Production mode

When enabled, new subscribers are not allowed to join the UniPrint domain.

Policies



Administrators can configure how UniPrint applies configuration settings from alternate sources. Alternate sources include: Active Directory group policy and saved user preferences.

Selecting the **Enable policies** option instructs UniPrint to apply settings in the order of precedence set in this list. Configuration sources at the top of the list have the highest priority. To disable a source, clear the check box beside it in the list.

Clearing the **Enable policies** option forces UniPrint to apply settings based solely on the ones set from the UniPrint Management Console. This is useful when troubleshooting a configuration issue.

User policy When selected, settings configured for specific users or user groups through Active Directory group policy will be applied. This policy is only applicable to the UniPrint Application Server. (*Default is Selected*)

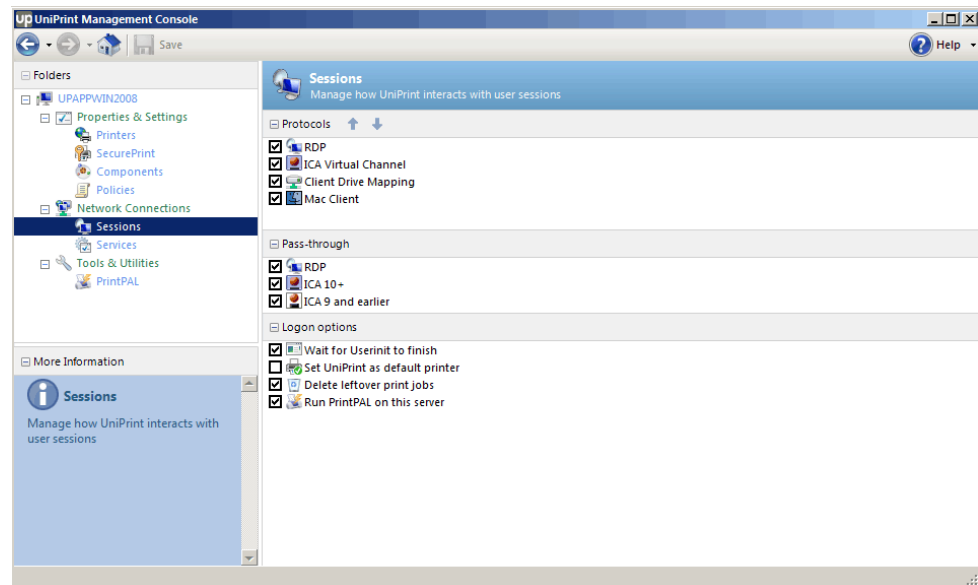
Machine policy When selected, settings configured for specific UniPrint components through Active Directory group policy will be applied. (*Default is Selected*)

User settings When selected, certain settings configured by users will be persistent across multiple ICA/RDP sessions. These settings include: Orientation, Page Size, Resolution, Paper Source and Double sided printing. They may, however, be overridden by a group policy listed higher in the processing order. This policy is only applicable to the UniPrint Application Server. (*Default is Not Selected*)

Machine settings Machine settings are default settings configured from the UniPrint Management Console and cannot be disabled. These settings always have the lowest priority. To enforce machine settings, clear **Enable policies**. (*Default is Selected and cannot be disabled.*)

Network Connections

Sessions (UniPrint Application Server only)



Protocols UniPrint supports two virtual channel protocols: RDP and ICA. Based on the connecting client's protocol, UniPrint creates a private, protocol-specific virtual channel between the application server and the client device for transferring rendered print jobs. Available options include:

Protocol	Comment
RDP	Does not require Citrix to be installed on the terminal server.
ICA Virtual Channel	Does not require client drive mapping to be enabled on the Citrix server.

Protocol	Comment
Client Drive Mapping	Requires client drive mapping to be enabled on the Citrix server and is compatible with both Windows and non-Windows clients.
Mac Client	Allows a Macintosh machine to access an application server.

To change the order UniPrint uses when auto-detecting the transfer protocol, click the protocol name and then click the arrow buttons to move the selected protocol up and down the list. Only the first detected transfer protocol is used. *(Default is RDP, ICA Virtual Channel, Client Drive Mapping, Mac Client)*

Pass-through Selecting this option allows UniPrint to treat this application server as a pass-through client, routing print jobs printed from another application server that has UniPrint Application Server installed. As a pass-through client, UniPrint spools print jobs through chained ICA/RDP sessions where users connect from one ICA/RDP session to another by launching a second ICA/RDP session within their original session. Pass-through printing allows UniPrint to send print jobs seamlessly through multiple ICA/RDP sessions to the first client workstation in the chain. *(Default is Not Selected)*

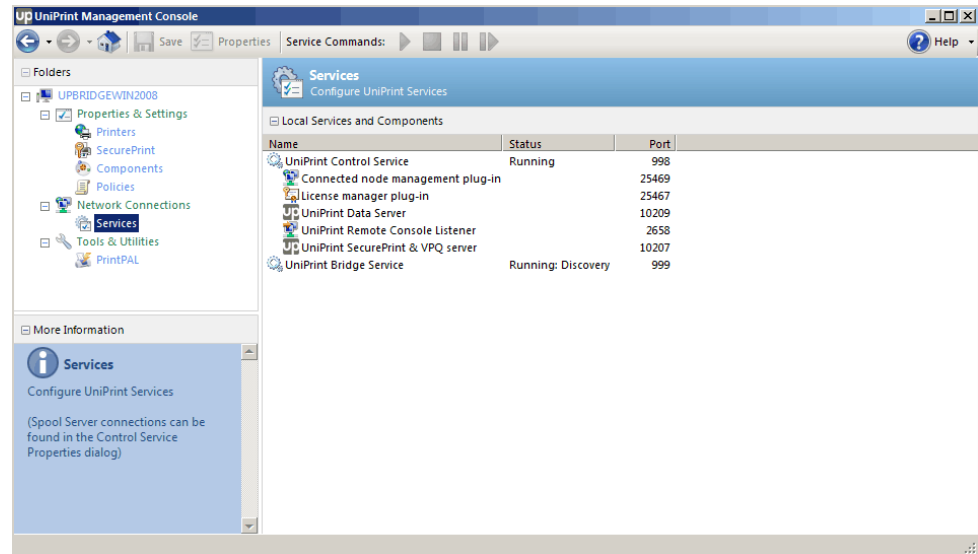
Logon options **Wait for Userinit to finish**
If enabled, UniPrint will wait for the Userinit Logon Application to finish before launching UniPrint Logscript. *(Default is Selected)*

Set UniPrint as default printer
When this option is selected, all users who have access to the UniPrint printer will have it set as their default printer in their sessions. *(Default is Selected)*

Delete leftover print jobs
Deletes any leftover print jobs from disconnected sessions when the same user logs back on to the application server. *(Default is Not Selected)*

Run PrintPAL on this server
Launches the PrintPAL Client when a session is started. The PrintPAL Client icon will appear in the notification area at startup. *(Default is Not Selected)*

Services



UniPrint-related services can be stopped, paused and restarted. The properties of these services can also be edited by clicking the service to select it and then clicking **Properties**.

UniPrint Control Service

This service resides on all UniPrint component servers and maintains information exchange connections with UniPrint routing servers and controls execution of UniPrint plug-ins and on-demand processors. You can edit the Port, Log Level and add, edit or delete a Bridge connection. The default port is 998.

Connected node management plug-in

This service resides on the UniPrint Bridge and manages the presence of active UniPrint nodes and services node-related requests. Only the Port and Log Level settings can be edited. The default port is 25469.

License manager plug-in

This service resides on the UniPrint Bridge and is responsible for active license administration and distribution. Only the Port and Log Level can be edited. The default port is 25467.

Print job processor

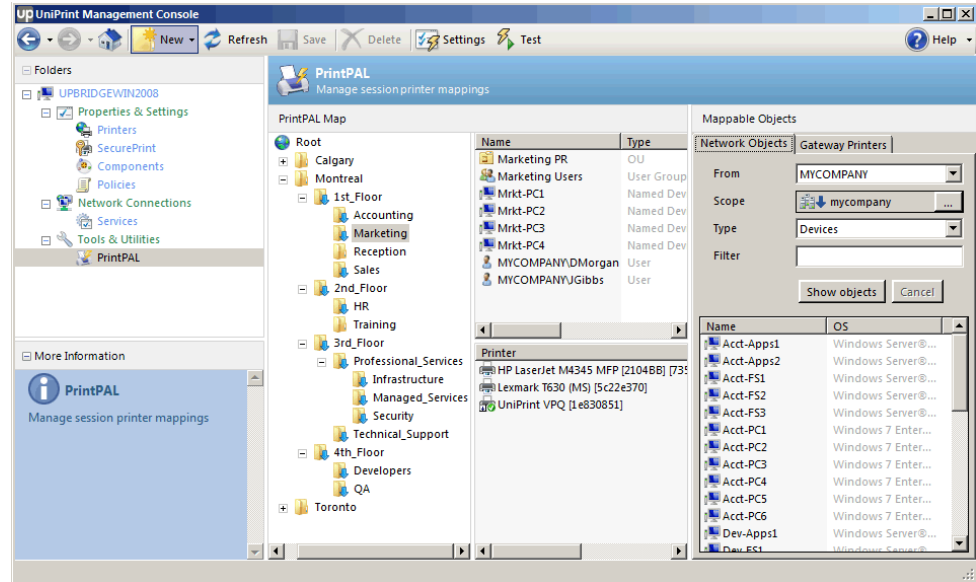
This service resides on the UniPrint Print Server and accepts print jobs from servers and relays information to the UniPrint rendering engine. It is also responsible for monitoring and reporting print job status back to the originating server. The Log Level and Port number can be edited and print jobs can be set to be saved with a specified naming convention. The default port is 10206 and naming convention is %USER%- %FILE% which are placeholders for user name and file name. The naming convention refers to the print job name displayed in the print queue. If the **Save jobs** option is

enabled, print jobs are saved on the UniPrint Print Server in \\Program Files\\UniPrint Suite\\Services\\Data\\PrintJob.

UniPrint Data Server	This service resides on the UniPrint Bridge and manages information exchange between SecurePrint and VPQ subsystem and the vPad devices. It also acts as a SecurePrint database access layer. The Log Level and Port can be edited. The default port is 10209.
UniPrint vPad device relay server	This service resides on the UniPrint Print Server and relays information to and from vPad devices. It also acts as a conduit to the SecurePrint database layer. The Log Level and Port can be edited. The default port is 10208.
UniPrint Remote Console Listener	This service resides on all UniPrint component servers and accepts console commands from remote servers. Only the Port can be edited. The default port is 2658.
UniPrint SecurePrint & VPQ server	This service resides on the UniPrint Bridge and manages print job information and data between the SecurePrint & VPQ subsystem and the vPad devices. It also acts as a SecurePrint database access layer. Only the port number and log level can be edited. The default port is 10207.
UniPrint Bridge Service	This service resides on the UniPrint Bridge and acts as an information router between UniPrint nodes. It also authenticates and manages connections between UniPrint Control Services. The Port, Log Level and Mode can be changed. The default port is 999.

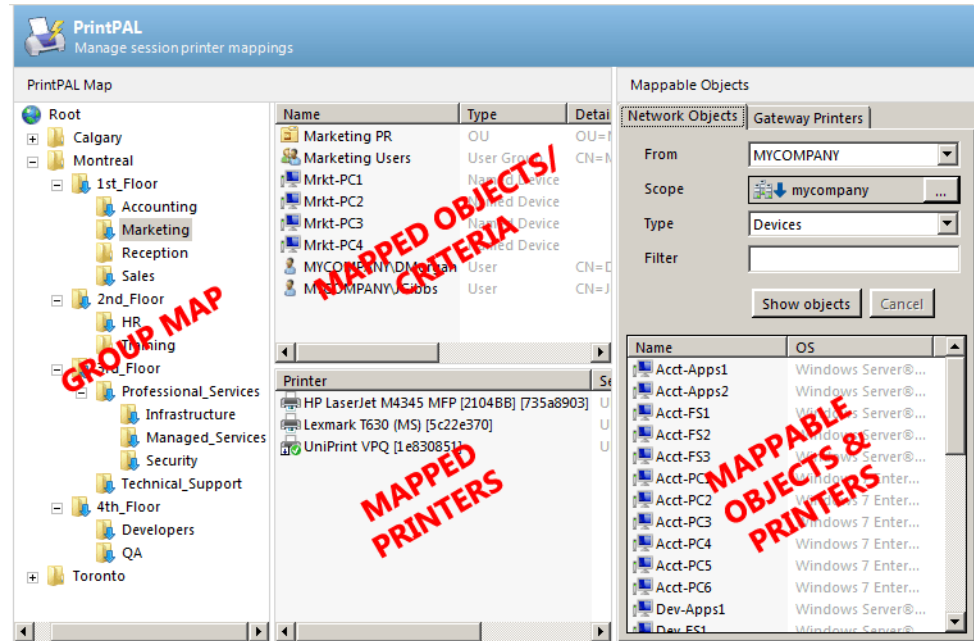
Tools & Utilities

PrintPAL



PrintPAL is a client device-to-printer mapping utility that is installed on the UniPrint Bridge. It provides a simple user interface that enables administrators to control or restrict which Gateway printers are initially added to a user's or group of users' sessions. Administrators first create groups of client devices, OUs, user groups and users and then map them to specific printers.

PrintPAL is comprised of four panes. The panes on the left side represents the PrintPAL map and the pane on the right side represents mappable objects which consists of network objects and Gateway printers.



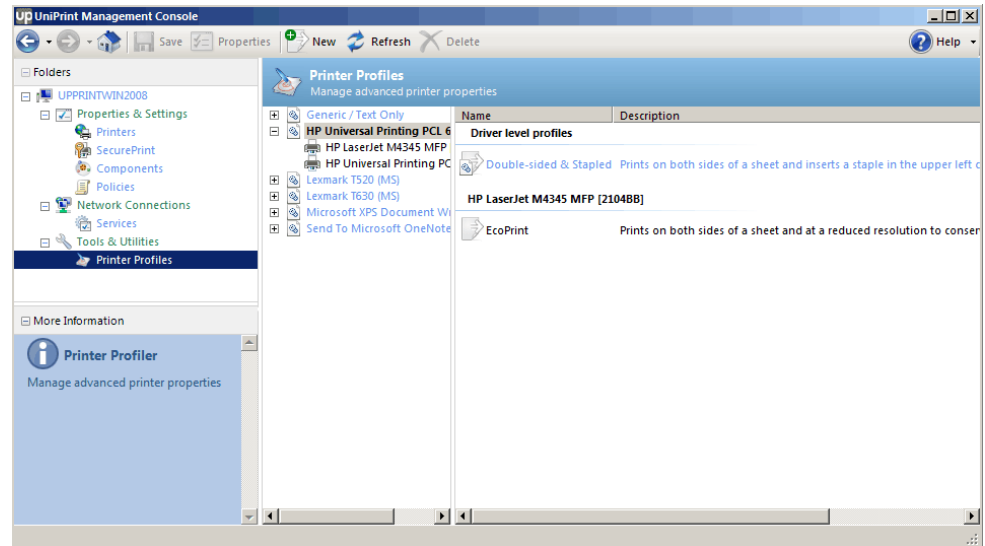
Group Map This pane represents your device group mapping in tree form. Use this pane to create parent and child groups to which devices and printers are mapped and then grouped. Groups can be organized geographically, departmentally and are typically dependant on your network topology and corporate organization.

Mapped Objects/ Criteria This pane displays the devices (for example, servers, PCs, thin clients and PDAs), users, user groups and organizational units assigned to the selected group. If **Match all criteria types** is enabled for the group, then this pane contains all of the criteria types required to be matched before printer are mapped to a session. The screen shot above contains a list of objects assigned to the Marketing group on the 1st Floor in Montreal.

Mapped Printers This pane displays the printers added to the devices listed in the **Mapped Objects** pane. During a client session, a user will initially have access to any of the Gateway printers listed in this pane.

Mappable Objects & Printers This pane lists all the objects that are from the domain specified in PrintPAL **Settings** and is divided into two tabs. The **Network Objects** tab lists all of the devices, users, user groups and OUs. The **Gateway Printers** tab lists all of the mappable printers. Objects can be dragged into the **Mapped Objects** pane and printers can be dragged to the **Mapped Printers** pane. This assigns these objects and printers to the selected group.

Printer Profiles



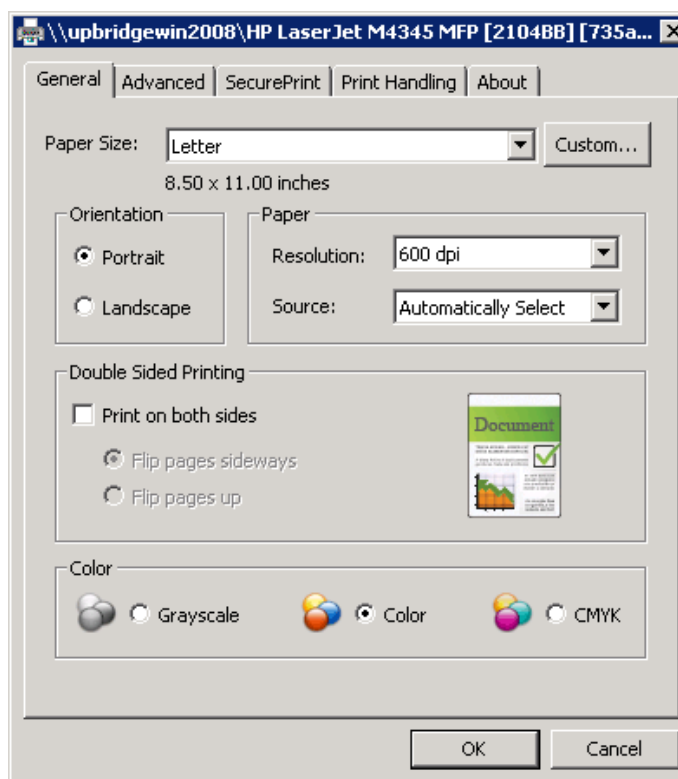
Printer Profiles resides on the UniPrint Print Server and can be used to enable advanced printer properties such as stapling, hole punching, binding, etc., that some printers support since it directly accesses the native printer driver.

Advanced printer properties can also be grouped together making it easier for users to print their document exactly as intended with only one mouse click.

Gateway Printer Properties Interface

You can change Gateway Printer Properties on a job-by-job basis. These properties affect how the PDF file is created and processed when you click **Print**. In some cases, printer properties (for example, orientation) may be automatically changed by the application from which you are printing. The property set in the application will take precedence over Gateway Printer Properties.

General Tab



Paper Size

This option sets the paper size for this print job. The various paper sizes and forms listed match those supported by the printer. The UniPrint printer

supports standard sizes and any custom forms defined on the application server.

Orientation

The orientation of a document can be set to either Portrait or Landscape. Portrait orients the document vertically while Landscape orients the document horizontally. Applications that set this parameter internally take precedence. Microsoft Word, for example, sets the Layout Orientation internally.

Paper

Resolution The resolution for a document can be set to 72, 150, 300, 600, 1200 or 2400 dpi. This option mainly affects image resolution, but text precision can also be improved by increasing this value. The designated printer must be capable of printing at the desired resolution setting.

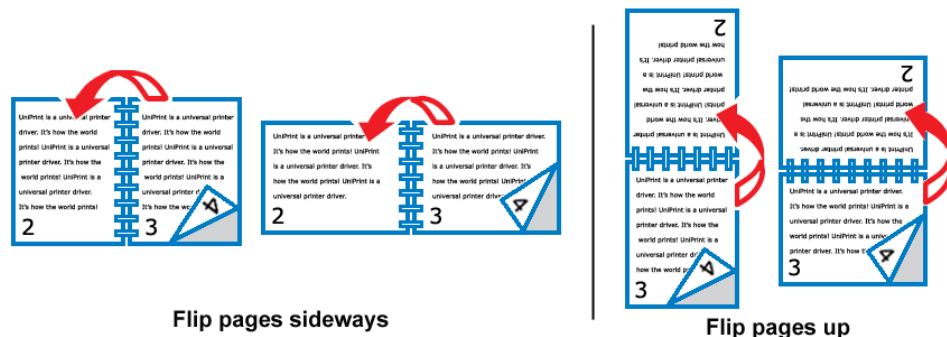
Source This option sets the paper tray source. The available options are Auto Select, Manual Feed, Envelope Feed and up to six tray selections.

Double Sided Printing

This option sets the double-sided printing functionality when **Print on both sides** is selected. The designated printer must have duplexing capabilities.

Flip pages up This refers to tablet style documents.

Flip pages sideways This refers to booklet style documents.



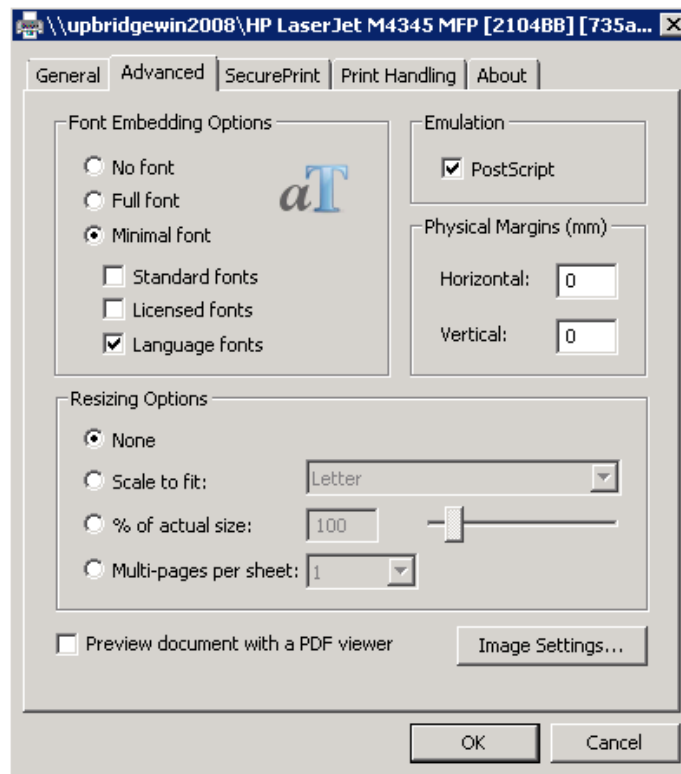
Color

Grayscale Selecting this option instructs UniPrint to render the print job in grayscale. It will convert color images into shades of black and white that best suit the original image.

Color This option is best for printers that utilize the R(Red), G(Green), B(Blue) color space and is also recommended for documents that will be displayed online or viewed on a computer monitor.

CMYK This option works best for printers that utilize the C(Cyan), M(Magenta), Y(Yellow) and K(Black) color space.

Advanced Tab



Font Embedding Options

Fonts are software and subject to license restrictions. Standard fonts are commonly found within operating systems and applications, and are legally transferable. Licensed fonts are, however, generally specialized fonts that are purchased and subject to license terms and conditions.

No font Selecting this option instructs UniPrint not to include any fonts in the output PDF file. This results in much smaller files being transferred and depends on the Print Server having the appropriate fonts installed for proper rendering.

Full font Selecting this option instructs UniPrint to include all True Type and Type1 (PostScript) fonts used by the source document in the output PDF file. This

results in larger files but ensures a consistent look to the document on any platform.

Minimal font Selecting this option instructs UniPrint to embed only portions of the font file that are used by the source document.

Standard fonts

If selected, UniPrint will embed the Arial and Times New Roman font files. These fonts are not embedded by default since they are provided with Adobe Reader.

Licensed fonts

If selected, UniPrint will embed licensed fonts that are installed on the application server. However, the fonts may not be embedded if the font license agreement prohibits embedding.

Language fonts

If selected, UniPrint will convert characters that are not in Western European or US character sets (such as Eastern European and Far Eastern characters). This conversion tends to increase the file size.

Emulation

PostScript Enabling this option emulates the UniPrint printer driver as a PostScript printer to the application. This is particularly useful when printing documents with vector graphics such as WordArt objects or semi-transparent backgrounds from Microsoft Office.

Physical margins (mm)

Most printers have a minimum physical margin below which they cannot generate any output. Each printer's mechanical design dictates the size of this printable area and the size of the margins. Applications use this value to prevent users from drawing outside the printable area.

Horizontal Specifies the margin from the left and right edge of the paper.

Vertical Specifies the margin from the top and bottom edge of the paper.

Resizing Options

Although PDF files can be created as large as 38 100 000 cm in either direction, most desktop printers cannot print large documents. To print oversized documents you can select one of the appropriate options.

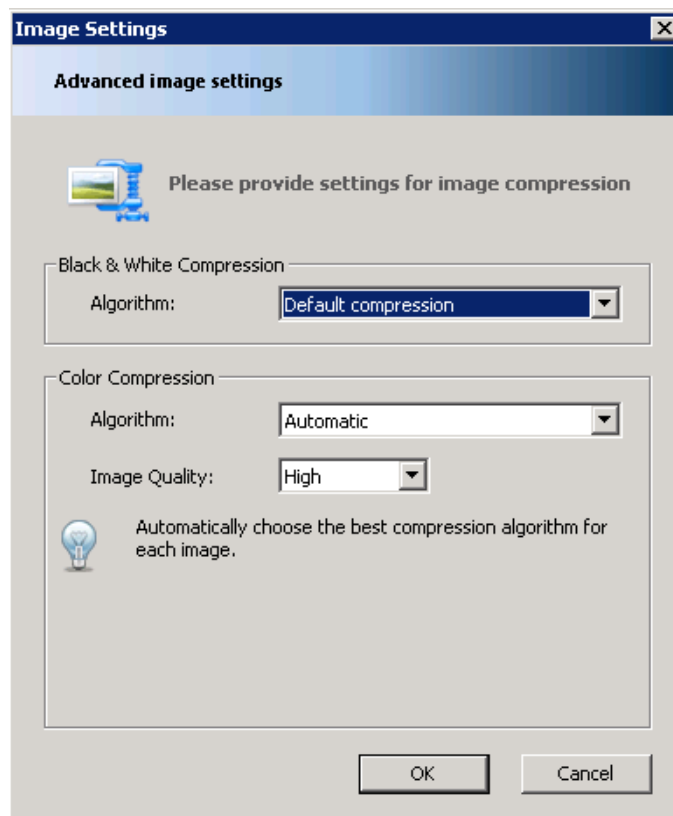
Scale to fit Expands or shrinks the original document to fit on a specified paper size. This option changes the size of the created PDF.

- % of actual size** Expands or shrinks the document by a specified percentage. If the percentage is increased too much, the document will only print the upper left area of the document.
- Multi-pages per sheet** Enables N-up printing, whereby multiple pages are printed on a single sheet of paper. Multi-pages per sheet is done intelligently to maximize legibility with the number of pages per sheet selected and the original orientation of the document. This option changes the document size so that it can be saved as a PDF.

Preview document with a PDF viewer

If enabled, Adobe Reader will be invoked prior to printing for preview purposes. Adobe Reader must first be installed on the UniPrint Application Server.

Image Settings Button



The following algorithms set the desired image compression for black and white and color images which results in a smaller file size.

**Black & White
Compression****Default compression**

This algorithm makes use of color palettes to reduce the overall size of all images including black and white images and it works well as long as the number of colors does not exceed 256.

CCITT Fax Group 4

The CCITT Fax Group 4 algorithm is recommended to reduce the size of black and white images. Image quality is not affected by this type of compression but file sizes can be greatly reduced.

**Color
Compression****Default compression**

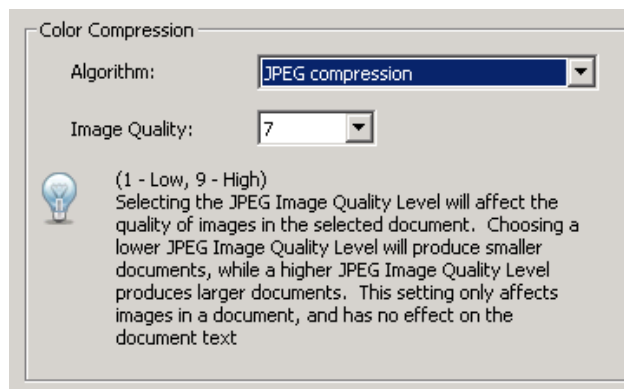
For color images, **Default compression** makes use of color palettes to reduce the overall size of all images. This algorithm works well as long as the number of colors does not exceed 256.

256 color compression

The 256 color compression algorithm calculates the most used 256 colors in an image and replaces all other color pixels by their closest match. This compression algorithm works very well with most applications but is relatively slow on large images with a greater number of colors.

JPEG compression

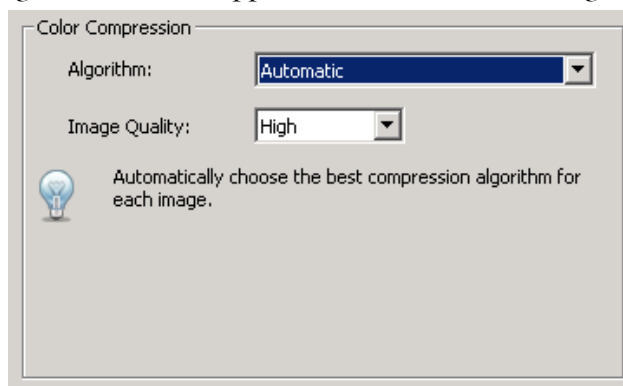
This compression algorithm produces excellent results for real life true color images with a small distortion of the source image. Since it removes image data and may reduce image quality, compressing images that have already been compressed using JPEG compression will lead to additional loss of information. It is, therefore, not recommended for graphics other than photographs.



When JPEG compression is selected, the **JPEG Image Quality Level** selection box appears, allowing you to choose from level 1 to 9. Level 1 produces lower quality images with very large compression ratio, whereas level 9 produces higher quality images with medium compression ratios. The default level is 7, which produces image quality suitable for most situations.

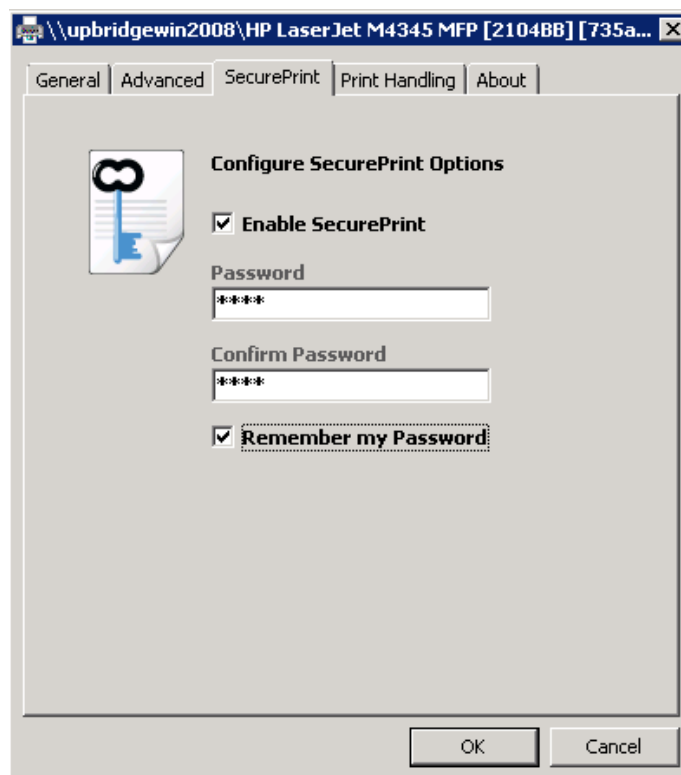
Automatic

With this compression algorithm, each image is analyzed separately to determine the best suited compression algorithm. The best suited compression algorithm is then applied to the individual image.



When Automatic compression is selected, the Image quality selection box appears, allowing you to choose between Maximum, High, Medium, Low and Minimum. The default level is *Maximum*, which will provide optimal results.

SecurePrint Tab

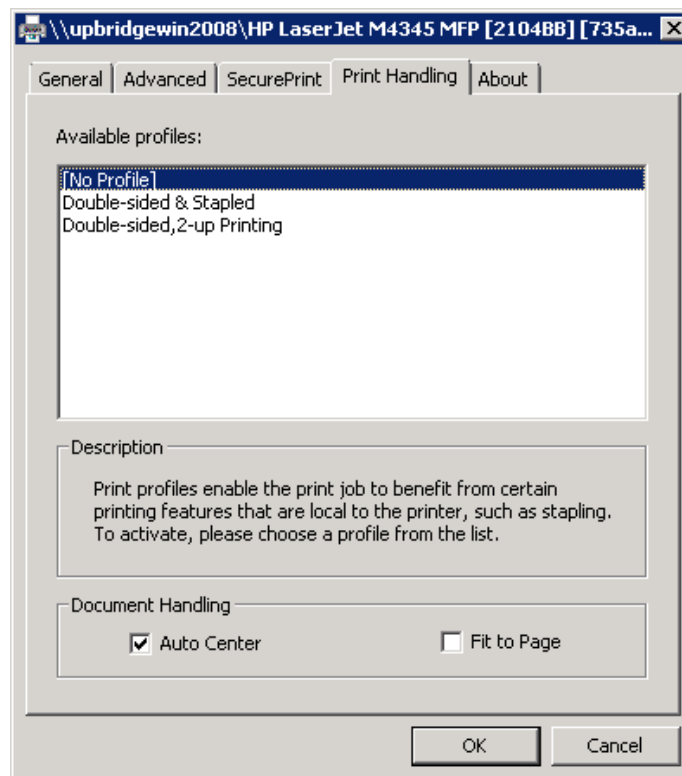


This feature allows users to set a password, which is then entered at a vPad device to release their print jobs. To set a password for SecurePrint, the **Enable SecurePrint** option must be selected. To set a password on a job-by-job basis, ensure that **Remember my password** is disabled.



NOTE: This feature only applies to Gateway and UniPrint VPQ printers and will be disabled for the UniPrint printer, UniPrint (Email PDF) and UniPrint (Save PDF) queues.

Print Handling Tab



NOTE: This tab and its features are only applicable to Gateway printers and will not appear for the UniPrint, UniPrint (Email PDF), UniPrint (Save PDF) or UniPrint VPQ printer queues.

Available profiles

By selecting a print profile, documents can be printed using a combination of advanced printer properties set in each profile. A description of each profile is given below.

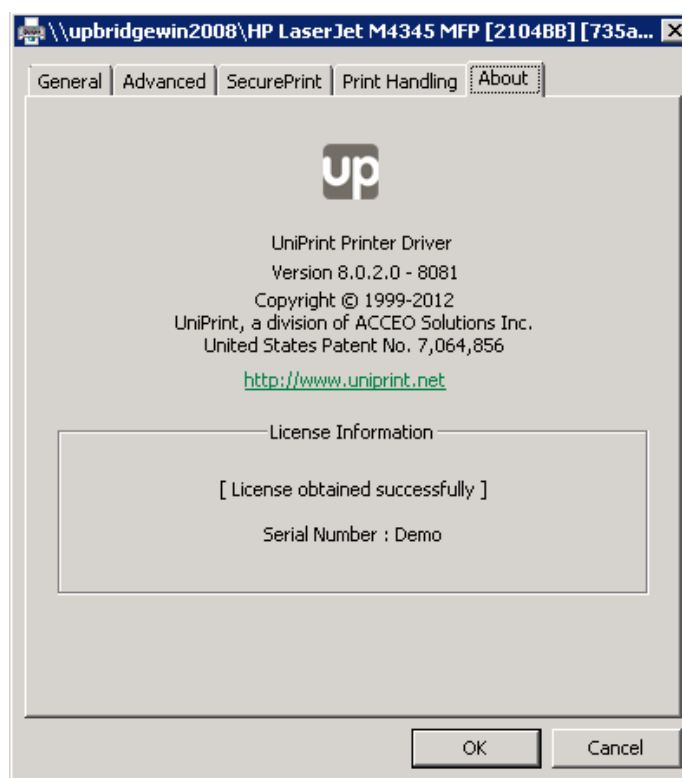
At least one printer profile must be created on the UniPrint Print Server before this area will be enabled.

Document Handling

Auto Center When set, document content will be both horizontally and vertically centered on a page.

Fit To Page When set, the document content is shrunk to fit the paper size selected in the **General** tab. This option does not affect the PDF file size.

About Tab



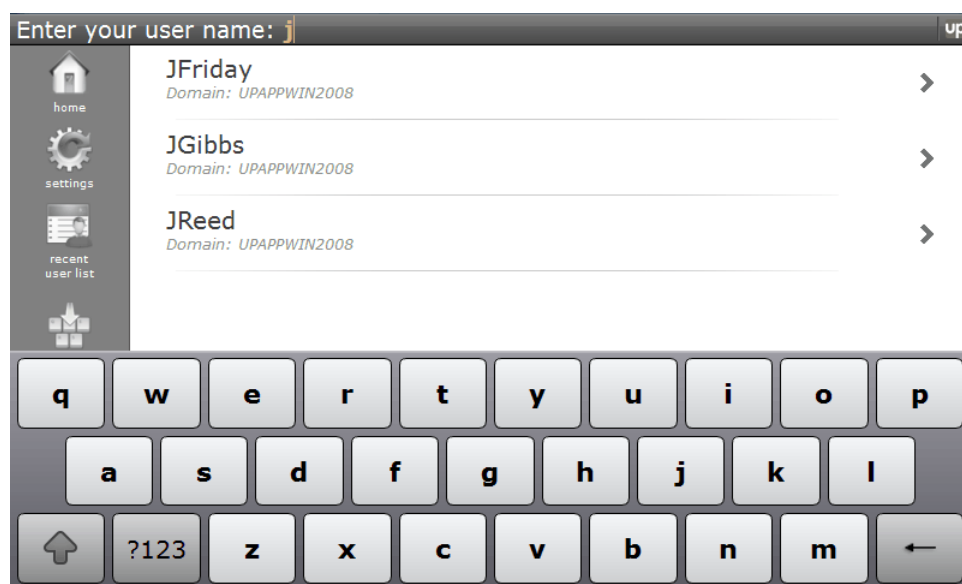
The **About** tab contains information about the UniPrint printer driver version and license information. If the license information box is blank or

states “Unable to obtain a valid license”, a watermark banner will be printed across each page.

The vPad console is a user interface that is used to retrieve print jobs sent to the virtual print queue (VPQ) or to a Gateway printer queue. After a password is set in printer properties and the document is sent to print. The user simply goes to the vPad device and either enters or taps their user name and then enters their password to release their print job.

The console itself does not store the print job. It simply notifies the UniPrint Bridge to release the print job.


Console Home



In the console Home page, the user initially searches for their user name after clicking **Print**. Depending on which Home page is set as the default, the user can either do a search by entering their user name with the keyboard or they can search a list of recently searched users.


In order to appear in the Recently Searched Users List, the user must have searched for their user name at least once. If this is first time using the vPad, then their user name will not appear on this list. A limited number of user

names maintained on the Recently Searched Users List can also be set by tapping **Settings, Advanced** and then tapping the **Recent User List** tab.

To return to the home page, tap **Home** .

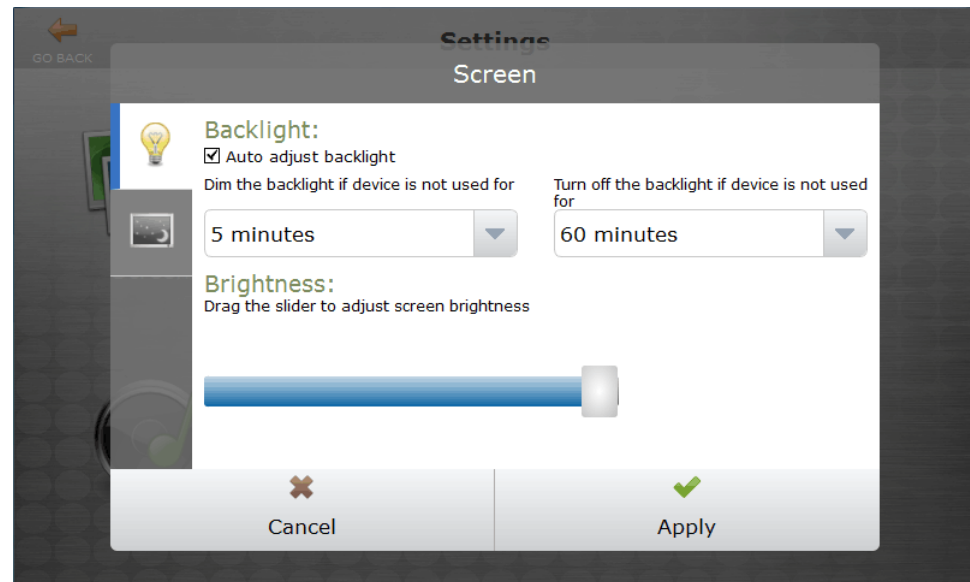
Settings



Use **Settings**  to configure the vPad device itself not the SecurePrint print jobs. Configuration settings such as screen backlighting, default home page, user interface language, sound and vPad device information is accessible through this screen.

To return to the home page, tap the orange back arrow at the top.

Screen

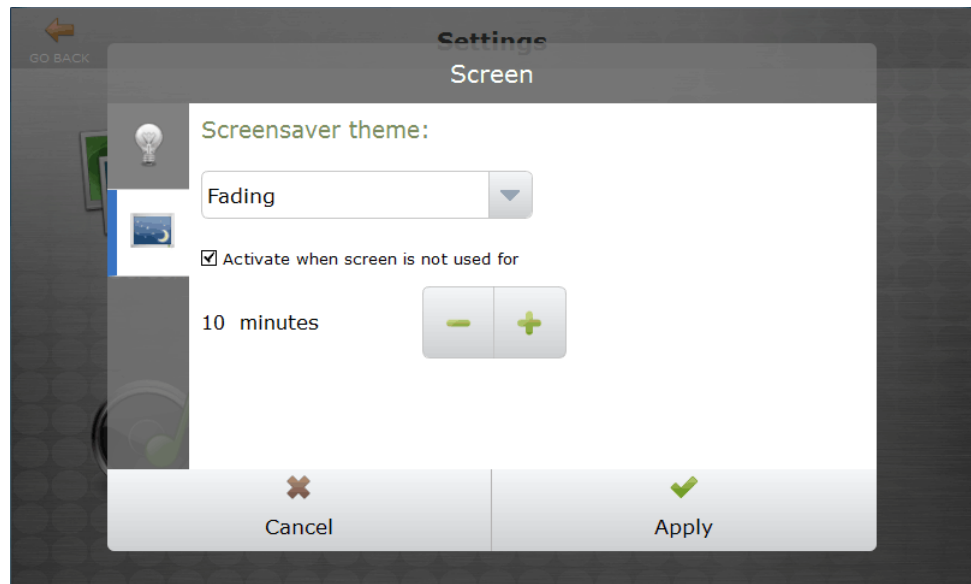


The Screen configuration settings are used to adjust backlighting and display brightness. You can also set the screen idle time to dim the display and also to turn off the display.

Backlight **Auto adjust backlight**

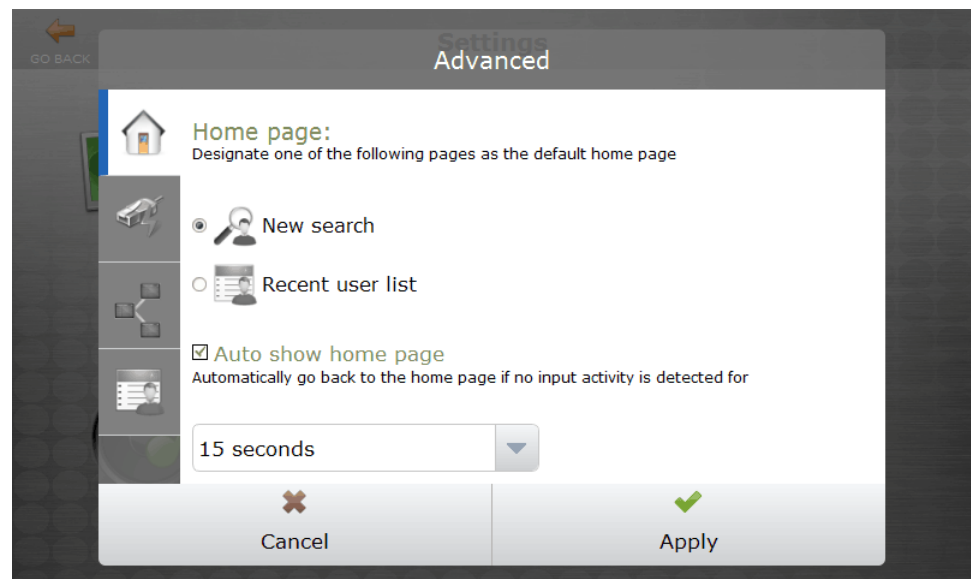
If selected, the screen will dim at the time selected under **Dim the backlight if device not used for** and turn off the backlight at the time selected under **Turn off the backlight if device not used for**. This features helps to conserve energy and prevents image persistence on the vPad display. The default time to dim is 5 minutes and the default time to turn off is 60 minutes.

Brightness Use the slider to adjust the brightness of the backlight from 0% on the far left to 100% on the far right. The default brightness is set to 100%



Screensaver theme The screensaver can either be set to Fading or Blank. Setting a screensaver on the vPad could help avoid image persistence. The screen idle time can also be set. By default the screensaver is disabled.

Advanced

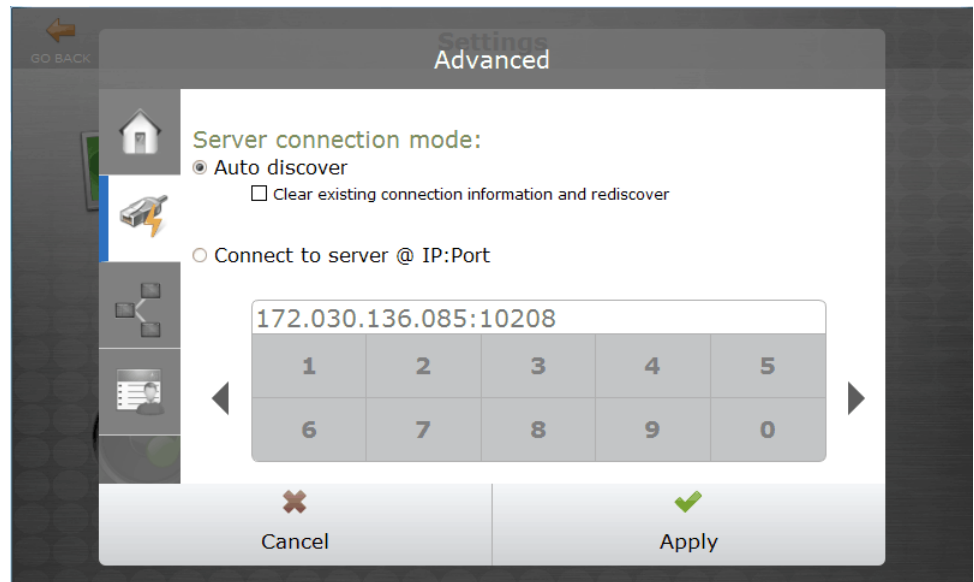


Through the Advanced settings, you can change the default home page, by clicking the HOME tab, change the IP address of the associated printer server by clicking the CONNECTION tab, configure ethernet connection by

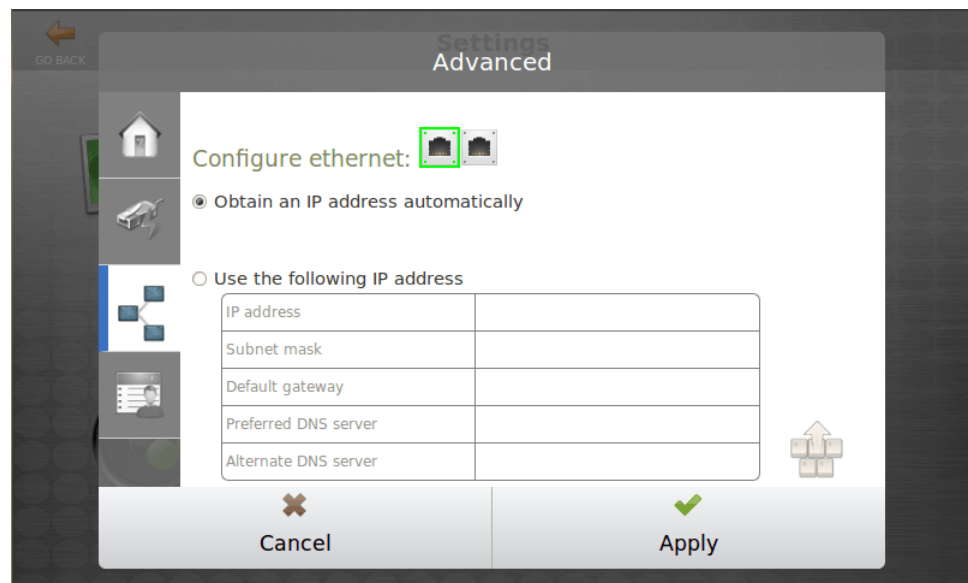
clicking the NETWORK tab, and adjust the number users maintained on the recently searched user list by clicking the NOTEPAD tab.

Home page In the HOME tab, the default home page can be changed from **New search** where the user has to key in their user ID to **Recent user list** where the user can scroll through a list of users. By default the home page is set to **New search**.

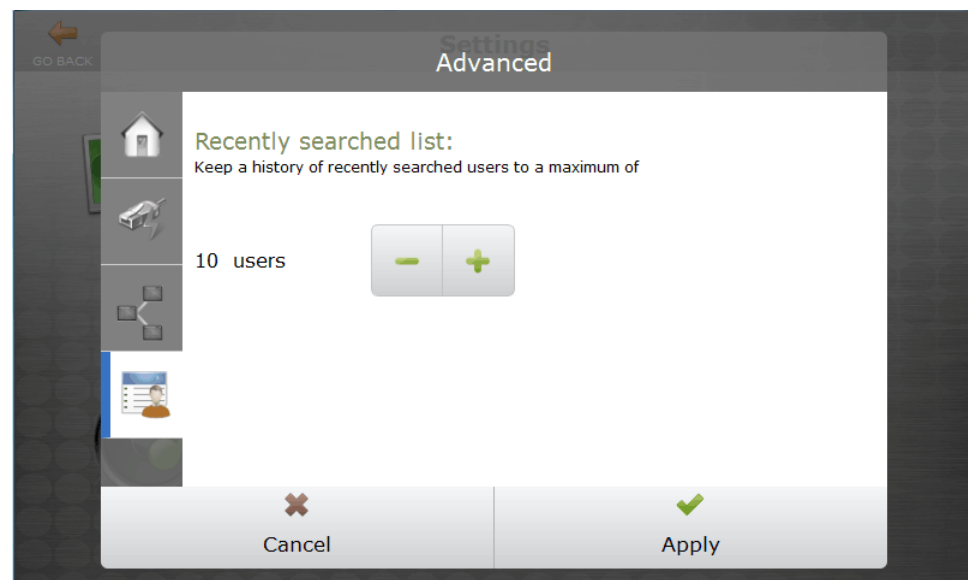
Auto show home page If enabled, the screen will refresh to the home page selected above at the selected screen idle time. The default screen idle time is 15 seconds.



Server connection mode The connection mode can either be set to auto-discover a UniPrint Print Server or you can enter the IP address of the UniPrint Print Server using the key pad.

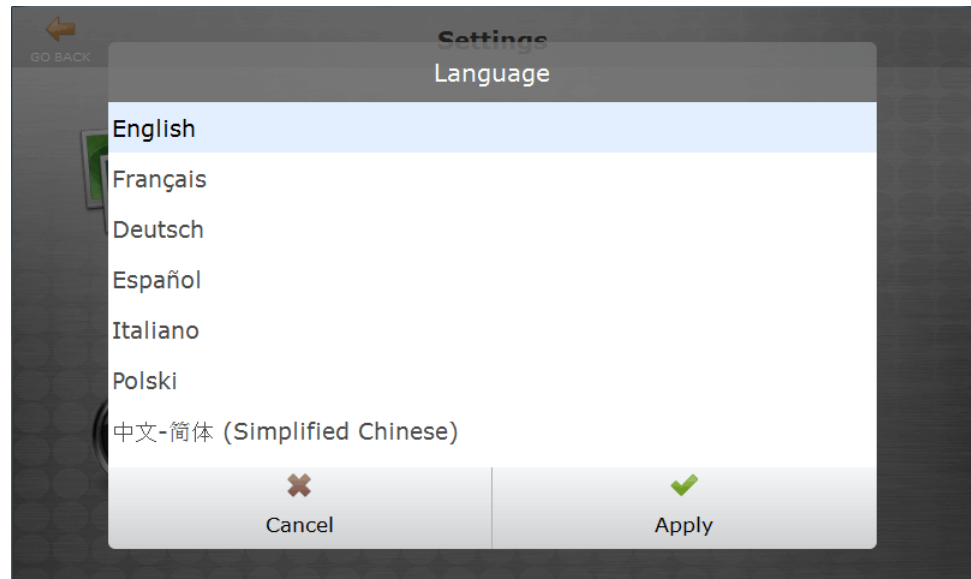


Configure ethernet A static IP address can be assigned to the vPad device by selecting **Use the following IP address** and enter the static IP address. This feature does not apply to the SecurePrint emulator and the screen is therefore disabled on the emulator. To assign a static IP address, ensure that the vPad is connected to eth1 (the green highlighted port). The right port that is not highlighted is for bridge configurations. For more information, see ["Assigning a Static IP Address To The vPad Device" on page 217](#).



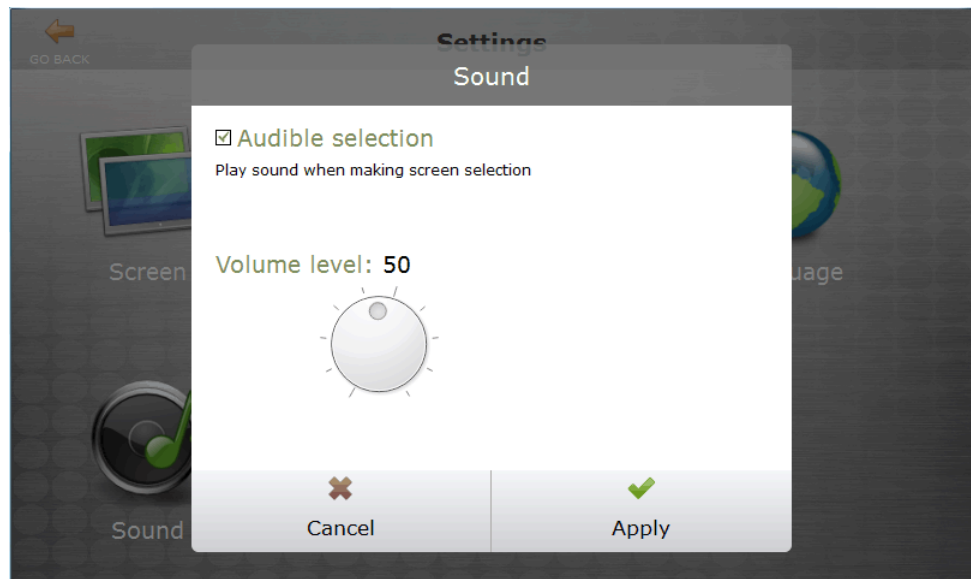
Recently searched list Sets the maximum number of users displayed on the recently searched list. The default number of user names is 10.

Language



English, French, German, Spanish, Italian, Polish and simplified Chinese user interface languages are now available.

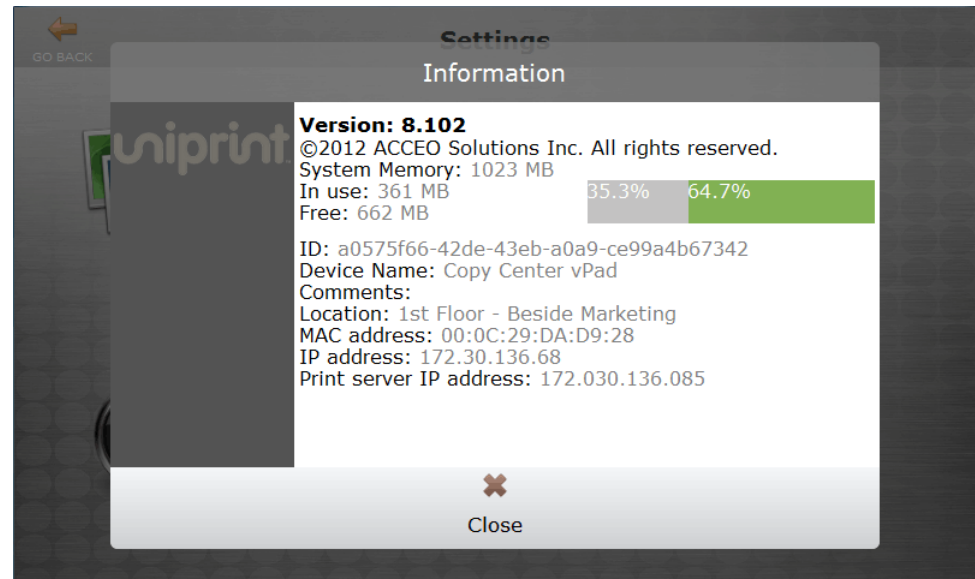
Sound



Audible selection If enabled, the vPad will emit a sound each time the screen is tapped.

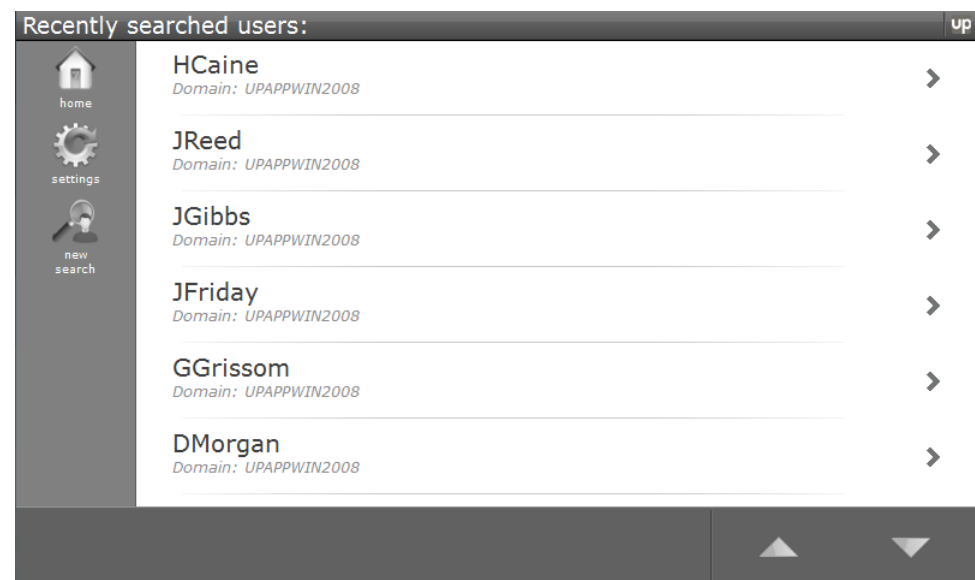
Volume level The volume level can be set from 0% (quiet) farthest counter-clockwise to 100% (loud) farthest clockwise. The default volume level is 50%.

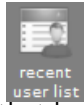
Information

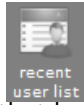


This screen contains information regarding the vPad device, for example, the amount of memory left, the IP address of the device and the IP address of the UniPrint Print Server it is connected to.

Recent User List

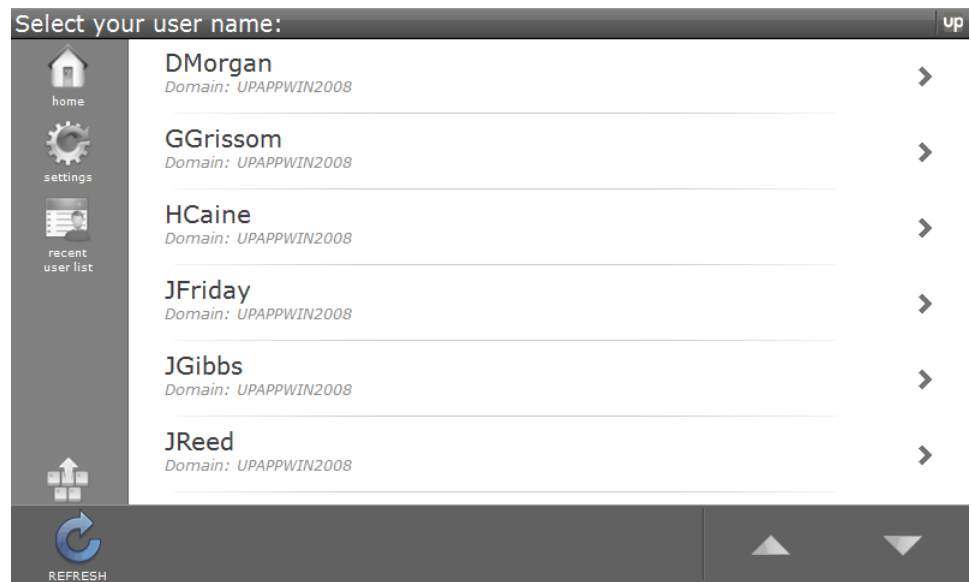





Tapping  reveals the Recent Users List. This screen contains a list of user IDs that have been recently searched. If the user has yet to search for their user ID, then their user ID will not appear on this list and they may want to either search for their User ID or scroll through the Pending Print Jobs User list.

To access a list of print jobs initiated by a particular user, click the user name.

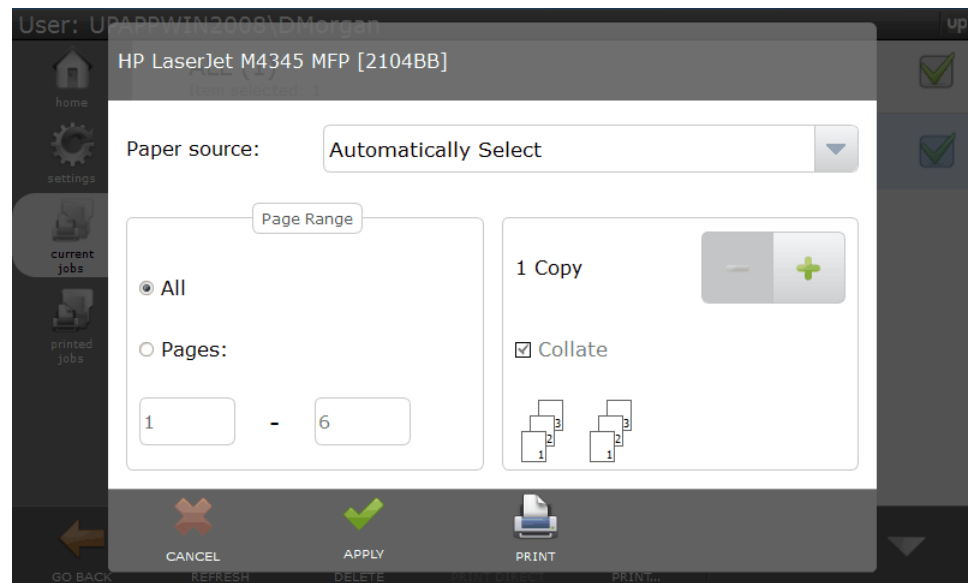
Pending Print Jobs User List



Tapping Hide Keyboard  reveals a list of users that have print jobs waiting to be released.

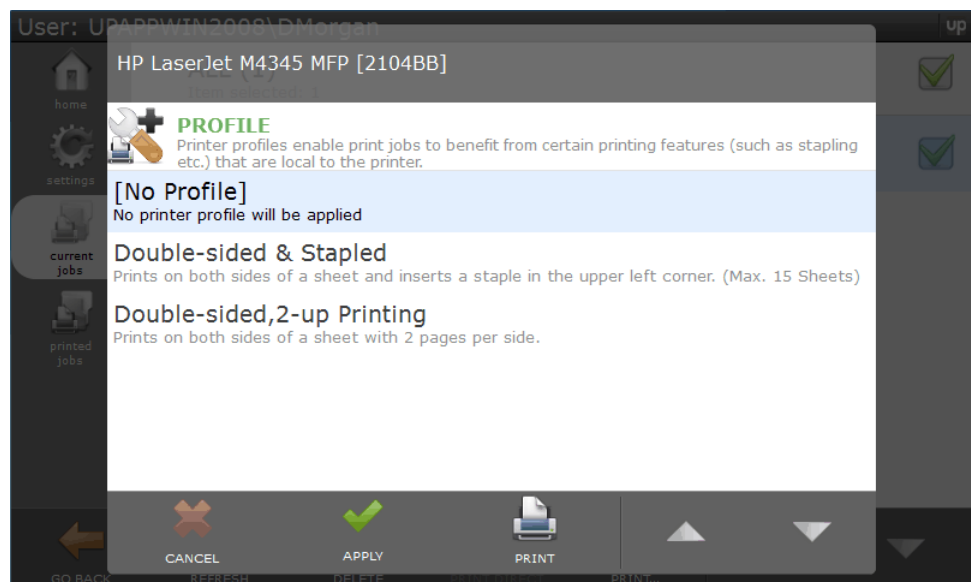
To access a list of print jobs to release, click the user name.

Printer Settings



Before the print job is released, users have the option to change printer settings such as paper source, page range and number of copies.

Profile



If users print to the UniPrint VPQ, they are not given an option to select a printer profile before clicking **Print** in the application. At the vPad, before

the print job is released, users can select a printer profile to apply to their print job. The default is **No Profile**.

Use this table for the UP_SETTING_PAPERSIZE = **n**, when installing UniPrint Application Server from the command line.

The following is a list of paper sizes supported by UniPrint:

n	Description
1	Letter (8 1/2 x 11 in)
2	Letter Small (8 1/2 x 11 in)
3	Tabloid (11 x 17 in)
4	Ledger (17 x 11 in)
5	Legal (8 1/2 x 14 in)
6	Statement (5 1/2 x 8 1/2 in)
7	Executive (7 1/4 x 10 1/2 in)
8	A3 (297 x 420 mm)
9	A4 (210 x 297 mm)
10	A4 Small (210 x 297 mm)
11	A5 (148 x 210 mm)
12	B4 (JIS) (257 x 364 mm)
13	B5 (JIS) (182 x 257 mm)
14	Folio (8 1/2 x 13 in)
15	Quarto (215 x 275 mm)
16	10 x 14 in
17	11 x 17 in
18	Note (8 1/2 x 11 in)
19	Envelope #9 (3 7/8 x 8 7/8 in)
20	Envelope #10 (4 1/8 x 9 1/2 in)

n	Description
21	Envelope #11 (4 1/2 x 10 3/8 in)
22	Envelope #12 (4 3/4 x 11 in)
23	Envelope #14 (5 x 11 1/2 in)
24	C size sheet (17 x 22 in)
25	D size sheet (22 x 34 in)
26	E size sheet (34 x 44 in)
27	Envelope DL (110 x 220 mm)
28	Envelope C5 (162 x 229 mm)
29	Envelope C3 (324 x 458 mm)
30	Envelope C4 (229 x 324 mm)
31	Envelope C6 (114 x 162 mm)
32	Envelope C65 (114 x 229 mm)
33	Envelope B4 (250 x 352 mm)
34	Envelope B5 (176 x 250 mm)
35	Envelope B6 (176 x 125 mm)
36	Envelope Italy (110 x 230 mm)
37	Envelope Monarch (3.875 x 7.5 in)
38	6 3/4 Envelope (3 5/8 x 6 1/2 in)
39	Std Fanfold (14 7/8 x 11 in)
40	German Std Fanfold (8 1/2 x 12 in)
41	German Legal Fanfold (8 1/2 x 13 in)
42	B4 (ISO) (250 x 352 mm)
43	Japanese Postcard (100 x 148 mm)
44	9 x 11 in
45	10 x 11 in
46	15 x 11 in
47	Envelope Invite (220 x 220 mm)
50	Letter Extra (9 1/2 x 12 in)

n	Description
51	Legal Extra (9 1/2 x 15 in)
52	Tabloid Extra (11.69 x 18 in)
53	A4 Extra (9.27 x 12.69 in)
54	Letter Transverse (8 1/2 x 11 in)
55	A4 Transverse (210 x 297 mm)
56	Letter Extra Transverse (9 1/2 x 12 in)
57	SuperA/SuperA/A4 (227 x 356 mm)
58	SuperB/SuperB/A3 (305 x 487 mm)
59	Letter Plus (8.5 x 12.69 in)
60	A4 Plus (210 x 330 mm)
61	A5 Transverse (148 x 210 mm)
62	B5 (JIS) Transverse (182 x 257 mm)
63	A3 Extra (322 x 445 mm)
64	A5 Extra (174 x 235 mm)
65	B5 (ISO) Extra (201 x 276 mm)
66	A2 (420 x 594 mm)
67	A3 Transverse (297 x 420 mm)
68	A3 Extra Transverse (322 x 445 mm)
69	Japanese Double Postcard (200 x 148 mm)
70	A6 (105 x 148 mm)
71	Japanese Envelope Kaku #2 (240 x 332 mm)
72	Japanese Envelope Kaku #3 (216 x 277 mm)
73	1Japanese Envelope Chou #3 (20 x 235 mm)
74	Japanese Envelope Chou #4 (90 x 205 mm)
75	Letter Rotated (11 x 8 1/2 in)
76	A3 Rotated (420 x 297 mm)
77	A4 Rotated (297 x 210 mm)
78	A5 Rotated (210 x 148 mm)

n	Description
79	B4 (JIS) Rotated (364 x 257 mm)
80	B5 (JIS) Rotated (257 x 182 mm)
81	Japanese Postcard Rotated (148 x 100 mm)
82	Double Japanese Postcard Rotated (148 x 200 mm)
83	1A6 Rotated (48 x 105 mm)
84	Japanese Envelope Kaku #2 Rotated (332 x 240 mm)
85	Japanese Envelope Kaku #3 Rotated (277 x 216 mm)
86	Japanese Envelope Chou #3 Rotated (235 x 120 mm)
87	Japanese Envelope Chou #4 Rotated (205 x 90 mm)
88	B6 (JIS) (128 x 182 mm)
89	B6 (JIS) Rotated (182 x 128 mm)
90	12 x 11 in
91	Japanese Envelope You #4 (235 x 105 mm)
92	Japanese Envelope You #4 Rotated (105 x 235 mm)
93	PRC 16K (146 x 215 mm)
94	PRC 32K (97 x 151 mm)
95	PRC 32K(Big) (97 x 151 mm)
96	PRC Envelope #1 (102 x 165 mm)
97	PRC Envelope #2 (102 x 176 mm)
98	PRC Envelope #3 (125 x 176 mm)
99	PRC Envelope #4 (110 x 208 mm)
100	PRC Envelope #5 (110 x 220 mm)
101	PRC Envelope #6 (120 x 230 mm)
102	PRC Envelope #7 (160 x 230 mm)
103	PRC Envelope #8 (120 x 309 mm)
104	PRC Envelope #9 (229 x 324 mm)
105	PRC Envelope #10 (324 x 458 mm)

n	Description
106	PRC 16K Rotated (215 x 146 mm)
107	PRC 32K Rotated (97 x 151 mm)
108	PRC 32K(Big) Rotated (97 x 151 mm)
109	PRC Envelope #1 Rotated (165 x 102 mm)
110	PRC Envelope #2 Rotated (176 x 102 mm)
111	PRC Envelope #3 Rotated (176 x 125 mm)
112	PRC Envelope #4 Rotated (208 x 110 mm)
113	PRC Envelope #5 Rotated (220 x 110 mm)
114	PRC Envelope #6 Rotated (230 x 120 mm)
115	PRC Envelope #7 Rotated (230 x 160 mm)
116	PRC Envelope #8 Rotated (309 x 120 mm)
117	PRC Envelope #9 Rotated (324 x 229 mm)
118	PRC Envelope #10 Rotated (324 x 458 mm)

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