



Quick Start Guide

For Microsoft Azure Deployments with SecurePrint

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Introduction

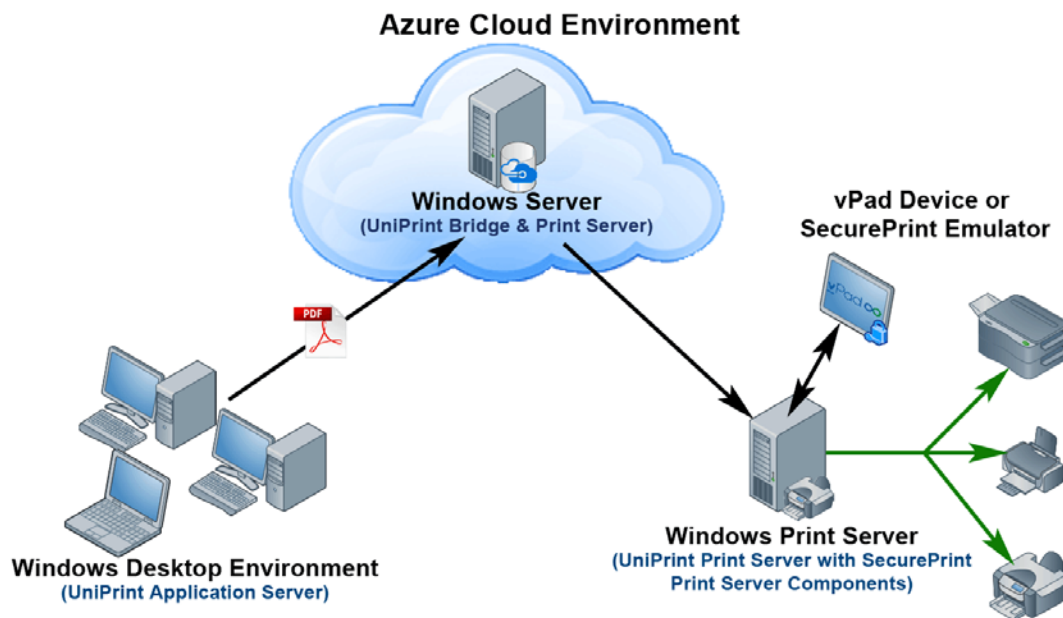
This step-by-step guide is intended for those who want to set up UniPrint Infinity with minimal configuration using Microsoft Azure. UniPrint.net has provided a virtual machine in Azure that already has the UniPrint Bridge, UniPrint Print Server and SecurePrint components already installed. Only the necessary steps required to print to the UniPrint VPQ and release a SecurePrint print job will be covered. For additional assistance on customizing UniPrint Infinity or setting up many of UniPrint Infinity's features such as Printer Delegation, Printer Profiles, Archiving, and Statistics Monitoring refer to the [UniPrint Infinity Administrator's Guide](#).



NOTE: To access advanced printer preferences, for example, stapling and hole punching, use Printer Profiles. For more information on setting up and using Printer Profiles, refer to the [UniPrint Infinity Administrator's Guide](#).

This quick start guide is specific to environments whereby desktop PCs print through the Azure cloud environment.

Deployment Scenario



This scenario requires an Azure virtual machine (VM), a Windows Print Server, the UniPrint vPad or SecurePrint emulator and a Windows workstation. The Azure VM will have UniPrint Bridge and Print Server pre-installed along with all of the necessary SecurePrint components. The Windows print server will have UniPrint Print Server and SecurePrint Print Server components installed. The workstation will have UniPrint Application Server installed and will connect to the Azure VM.

Recommended System Requirements

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

- Microsoft Windows 7
- Microsoft Windows 8/8.1
- Microsoft Windows 10

- Microsoft Windows Server 2008 or R2
- Microsoft Windows Server 2012 or R2
- Microsoft Windows Server 2016

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

- 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 8/8.1
- Microsoft Windows 10

Recommended Installation Procedure



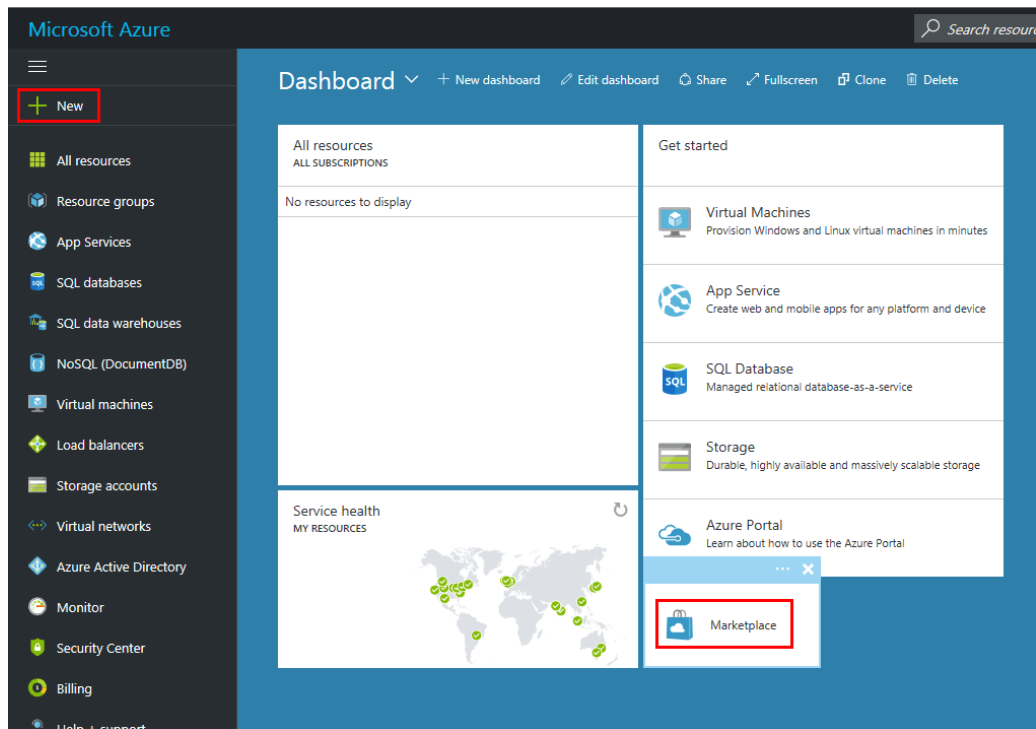
NOTE: The following instructions explain how to deploy UniPrint Infinity in Azure and on site. This installation scenario is designed and intended for testing purposes and does not reflect production best practices.

1. Through the Azure Marketplace, create and deploy a UniPrint Infinity virtual machine (VM). The virtual machine that is created contains two UniPrint components, UniPrint Bridge and UniPrint Print Server with most of the features of UniPrint Infinity such as SecurePrint.
2. Install UniPrint Print Server with SecurePrint Print Server components on a Windows print server and have it point to the public IP address of the UniPrint Azure VM.
3. Install UniPrint Application Server on a PC or workstation and have it point to the public IP address of the UniPrint Azure VM.
4. Install a test printer on the UniPrint Print Server and publish it to the UniPrint Azure VM.
5. Install the SecurePrint emulator on the workstation and then activate it on the UniPrint Azure VM. If you already have a vPad device, then you don't need to install the SecurePrint emulator, since the vPad comes with pre-installed software. However, you will still need to activate the vPad on the UniPrint Azure VM.
6. Add the test printer to the vPad/SecurePrint Emulator through the Management Console on the UniPrint Azure VM.
7. Use PrintPAL to assign the test printer and the UniPrint VPQ as local print queues to the workstation.

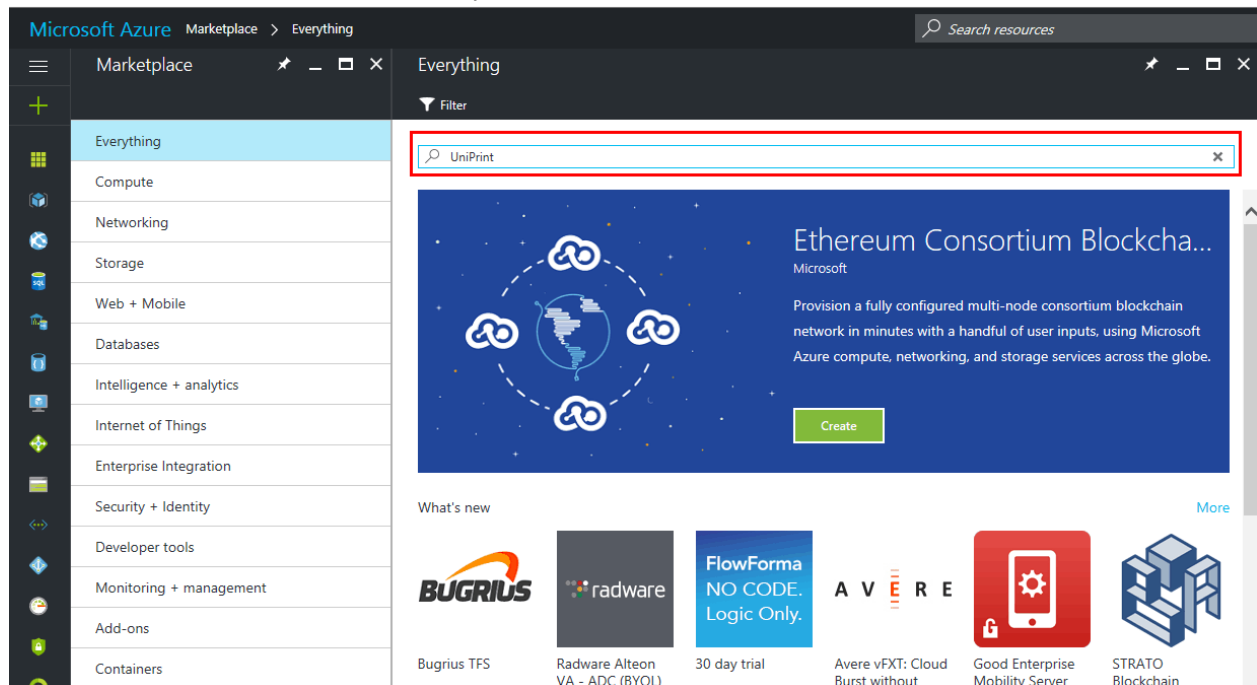
STEP 1: Create & Deploy a UniPrint Infinity VM in Azure

1. Log into the Microsoft Azure Portal, <https://portal.azure.com>.

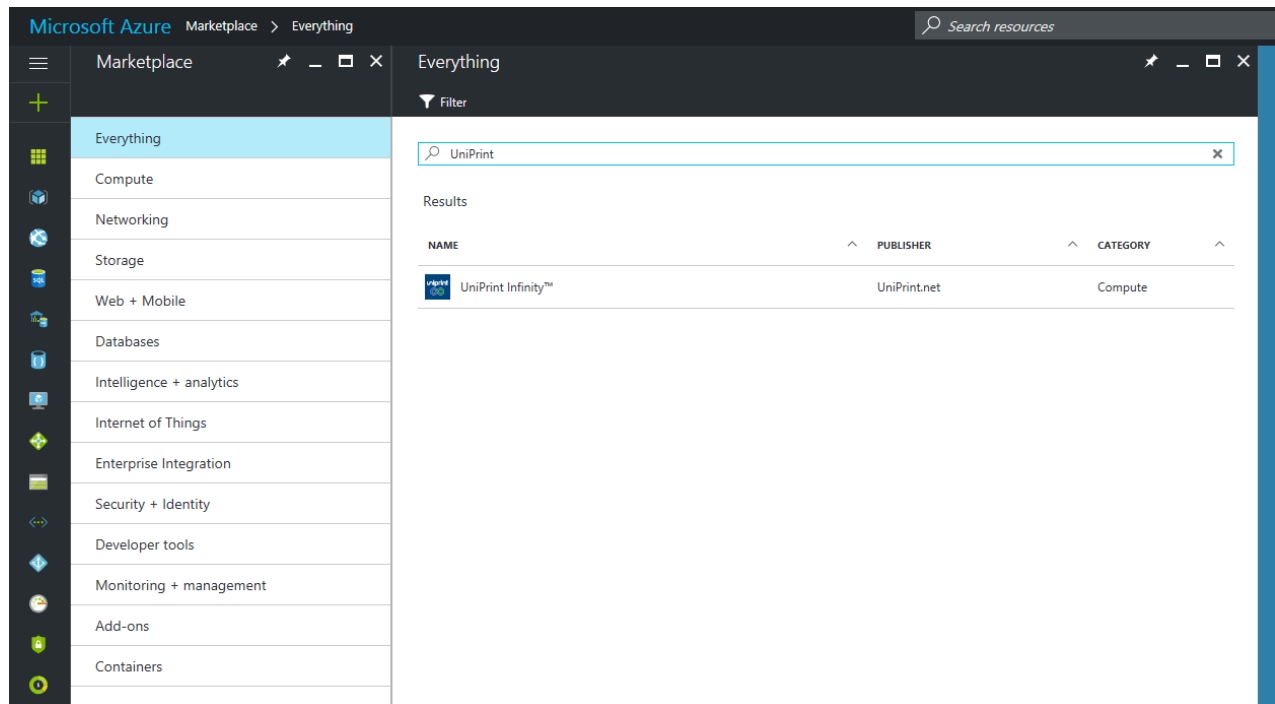
2. Depending on how the dashboard is laid out, click either **New** or **Marketplace**.



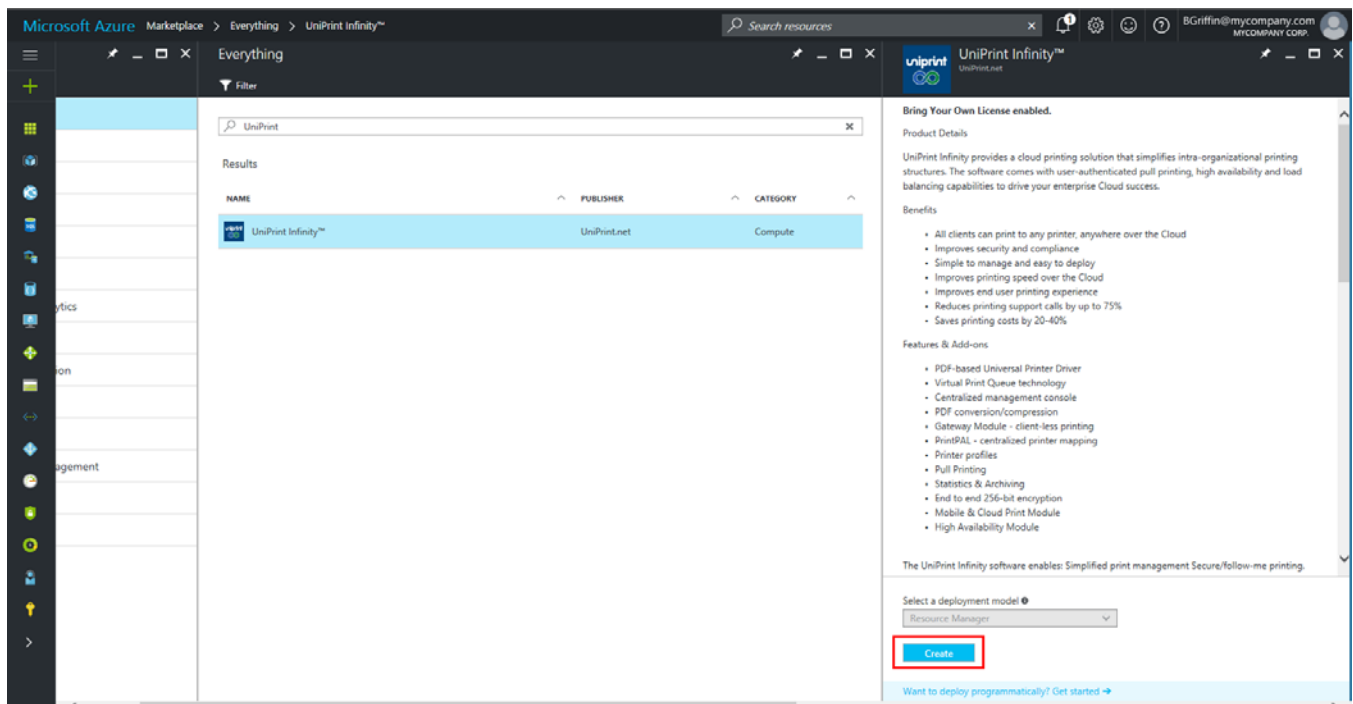
3. In the search box, enter **UniPrint** and then press **ENTER**.



4. Under **Results**, click **UniPrint Infinity**.



5. Click **Create**.



6. Under **Basics**, fill out the appropriate information and then click **OK**.

The screenshot shows the 'Create virtual machine' wizard in the Microsoft Azure portal, specifically the 'Basics' tab. The left-hand navigation pane lists five steps: 1. Basics (Configure basic settings), 2. Size (Choose virtual machine size), 3. Settings (Configure optional features), 4. Summary (UniPrint Infinity™ (Staged)), and 5. Buy. The main content area is divided into two sections. The top section contains the following fields: 'Name' (UniPrintTest), 'VM disk type' (SSD), 'User name' (Admin_BrianG), 'Password' (masked), 'Confirm password' (masked), 'Subscription' (UniPrint Testing), 'Resource group' (Create new, UniPrint_Azure_Test), and 'Location' (East US). The bottom section contains an 'OK' button.

- Name:** The Azure VM name cannot contain non-ASCII or special characters such as spaces or underscores.
 - VM Disk Type:** SSD or HDD. HDD is less expensive and is adequate for testing purposes.
 - Username:** Enter a user name.
 - Password:** The password must be 12 to 123 characters long and must contain one lowercase character, one uppercase character, one number and one special character.
 - Subscription:** Select a subscription to which to apply charges.
 - Resource Group:** Enter a name for the Azure Resource Group. The name can only contain alphanumeric characters, periods, underscores, hyphens and parentheses and cannot end in a period. Spaces are not permitted.
 - Location:** Select the closest region. Azure data centers are located throughout the world. Selecting the closest data center ensures faster and better performance.
7. Depending on the **VM Disk Type** and the **Location** chosen previously, different VM configurations will be available. Click to select the size and configuration of the virtual machine, for example **A3 Basic**, and then click **Select**. Chose a VM that closely matches the hardware recommendations for UniPrint Infinity, which are the following:
- 8 GB RAM
 - Quad core processor

- At least 100 GB of free disk space

The left screenshot shows the 'Choose a size' step in the Azure portal. It displays a grid of VM sizes categorized by 'Standard' and 'Basic' families. The 'Standard' family includes D51_V2, D52_V2, D53_V2, D54_V2, D55_V2, and D511_V2. The 'Basic' family includes A2, A3, and A4. Each size is listed with its core count, memory, storage, and price. The right screenshot shows the 'Choose a size' step with the 'Basic' family selected. The A3 Basic size is highlighted with a red arrow and labeled as the recommended size for UniPrint Infinity.

| VM Size | Cores | Memory (GB) | Storage (GB) | Price (CAD/MONTH) |
|------------------|-------|-------------|--------------|-------------------|
| D51_V2 Standard | 1 | 3.5 | 3200 | 66.04 |
| D52_V2 Standard | 2 | 7 | 6400 | 132.08 |
| D53_V2 Standard | 4 | 14 | 12800 | 265.06 |
| D54_V2 Standard | 8 | 28 | 25600 | - |
| D55_V2 Standard | 16 | 56 | 51200 | - |
| D511_V2 Standard | 2 | 14 | 12800 | - |
| A2 Basic | 2 | 3.5 | 4 | 71.47 |
| A3 Basic | 4 | 7 | 8 | 159.21 |
| A4 Basic | 8 | 14 | 16 | 318.43 |

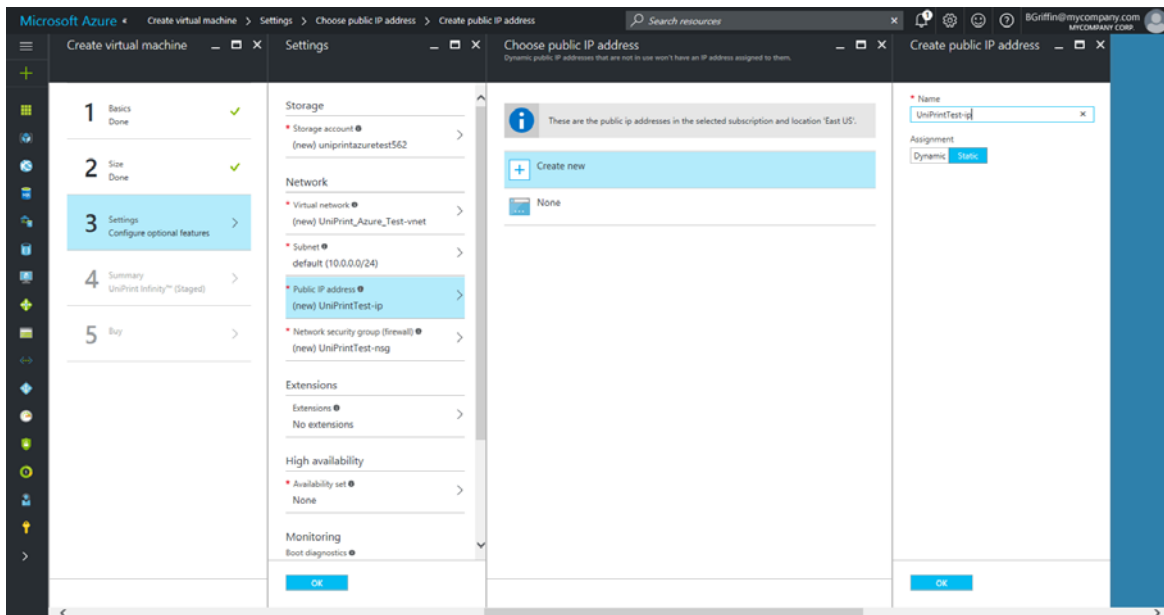
A3 Basic closely matches the recommended system requirements for UniPrint Infinity.

8. Under **Settings**, configure the various settings based on preexisting resources or create new ones where required and then click **OK**.
 - a. **Storage account:** Either associate this new virtual machine with a preexisting storage account or create a new one. The storage created should match the VM disk type selected in the **Basics** screen. For testing purposes, **Standard** performance and **Locally-redundant storage (LRS)** replication is adequate. For more information, see [Azure Storage replication](#). Click **OK**.

The screenshot shows the 'Settings' step in the Azure portal. The 'Storage' section is expanded, showing the 'Storage account' dropdown menu. The 'Create new' button is highlighted, indicating that a new storage account should be created. The 'Performance' dropdown is set to 'Standard' and the 'Replication' dropdown is set to 'Locally-redundant storage (LRS)'.

- b. **Virtual network:** For testing purposes, use the default settings.
- c. **Subnet:** For testing purposes, use the default settings.

d. **Public IP address:** Change the **Assignment** to **Static** and then click **OK**.



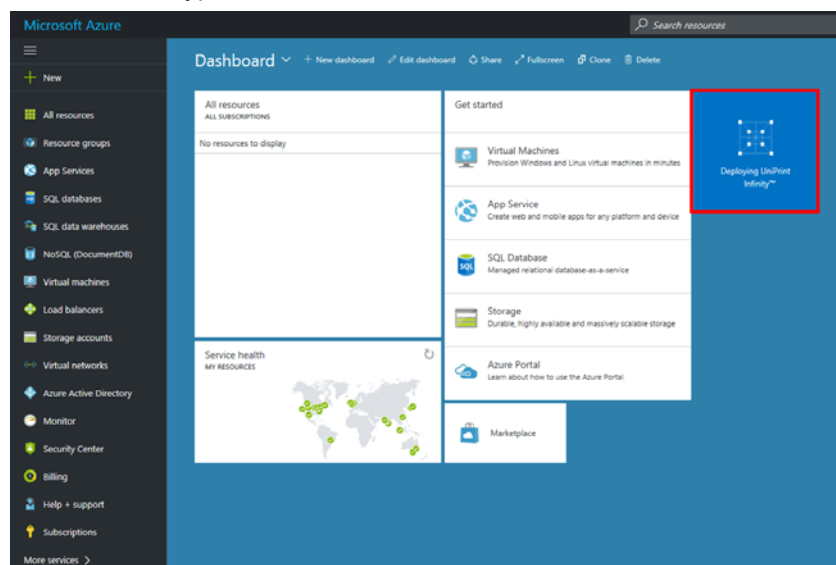
e. **Network security group (firewall):** For testing purposes, use the default settings.

f. For **Extensions**, **High Availability** and **Monitoring**, the default settings are adequate for testing.

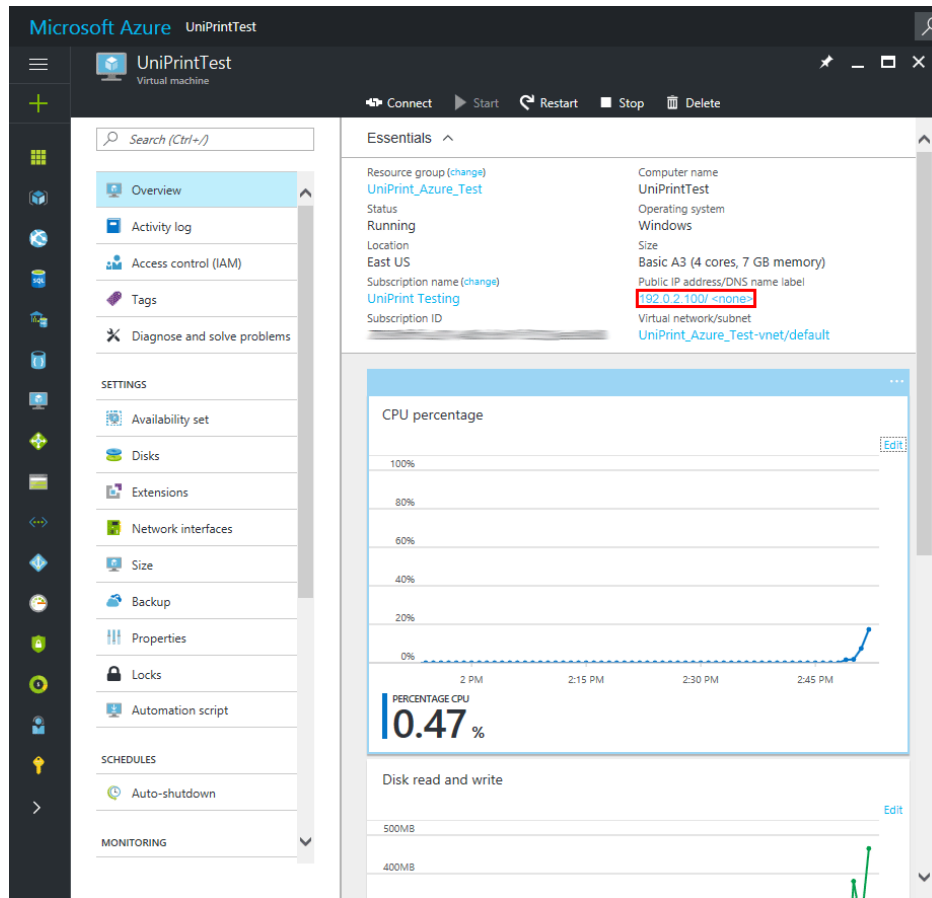
9. Review the summary and then click **OK**.

10. Review the **Offer details** and the **Terms of use** and then click **Purchase**.

11. The new tile will appear on the Dashboard indicating that UniPrint Infinity is being deployed. This could take 15 to 30 minutes depending on the machine type and size chosen.



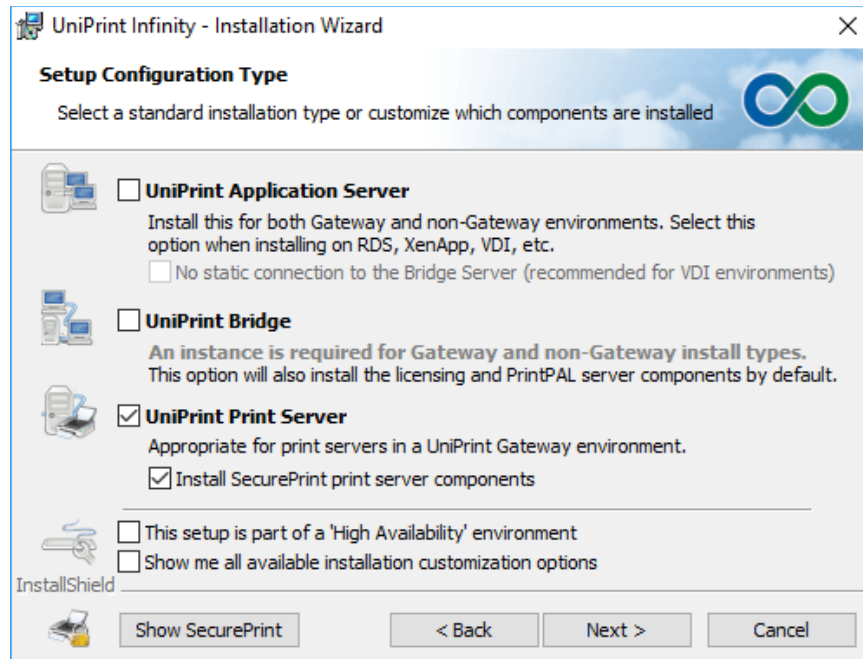
12. When deployment is complete, information and metrics for the UniPrint Infinity VM will appear on the Dashboard. Take note of the public IP address. This information is required when installing the UniPrint Print Server and UniPrint Application Server components.



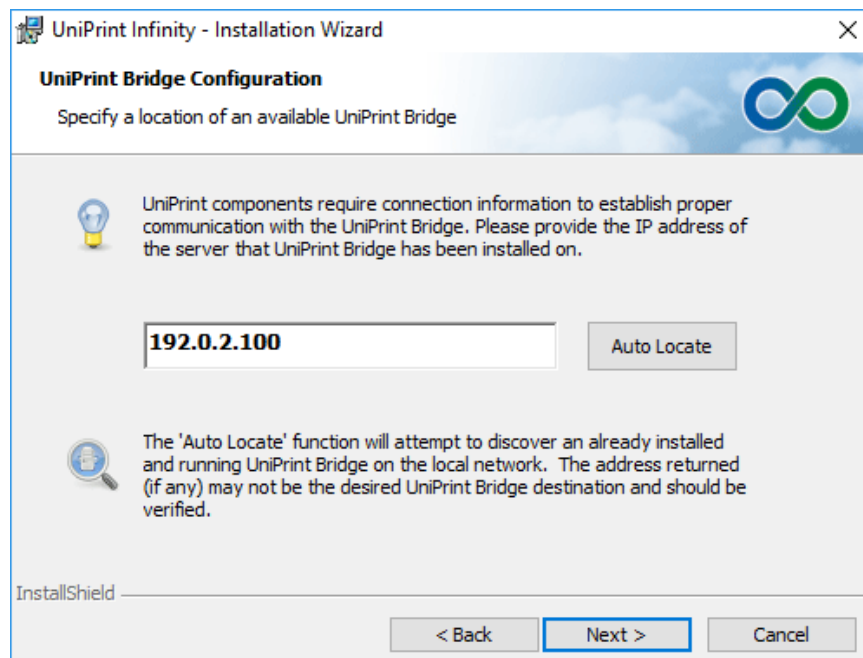
STEP 2: Install UniPrint Print Server

1. On a Windows print server, run the installation program **UniPrint91_*.exe** as an administrator.
2. In the **UniPrint Infinity Installation** dialog box, click **Next**.
3. In the **License Agreement** dialog box, click **I accept the terms in the license agreement** and then click **Next**.
4. In the **Destination Folder** dialog box, click **Next** to accept the default location for the UniPrint program files. Click **Change** to select a different location.

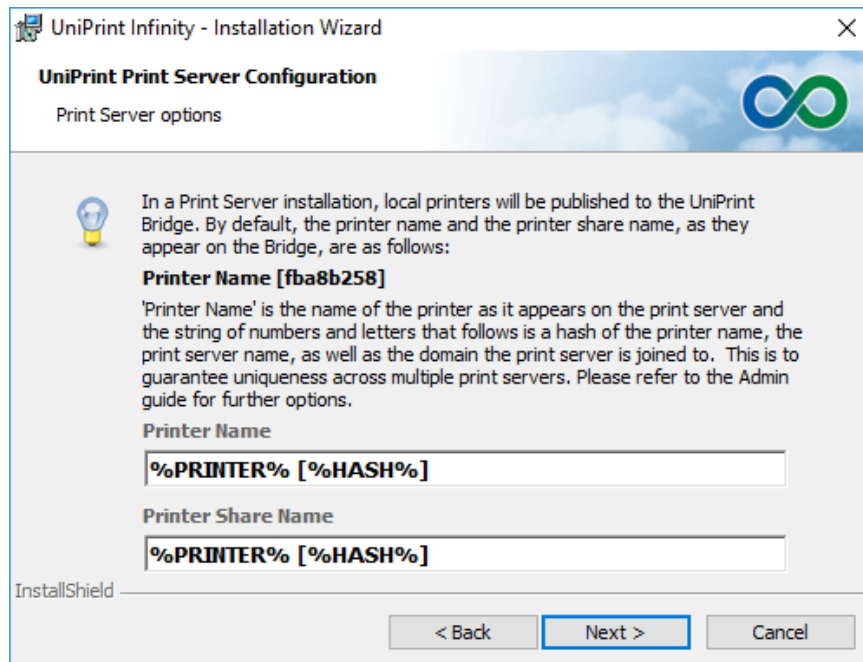
5. In the **Setup Configuration Type** dialog box, select **UniPrint Print Server** and then click **Next**. For SecurePrint, also select **Install Secureprint print server components**.



6. In the **UniPrint Bridge Configuration** dialog box, enter the public **IP Address** of the UniPrint Azure VM and then click **Next**.



7. In the **UniPrint Print Server Configuration** dialog box, click **Next** to accept the default printer naming convention.

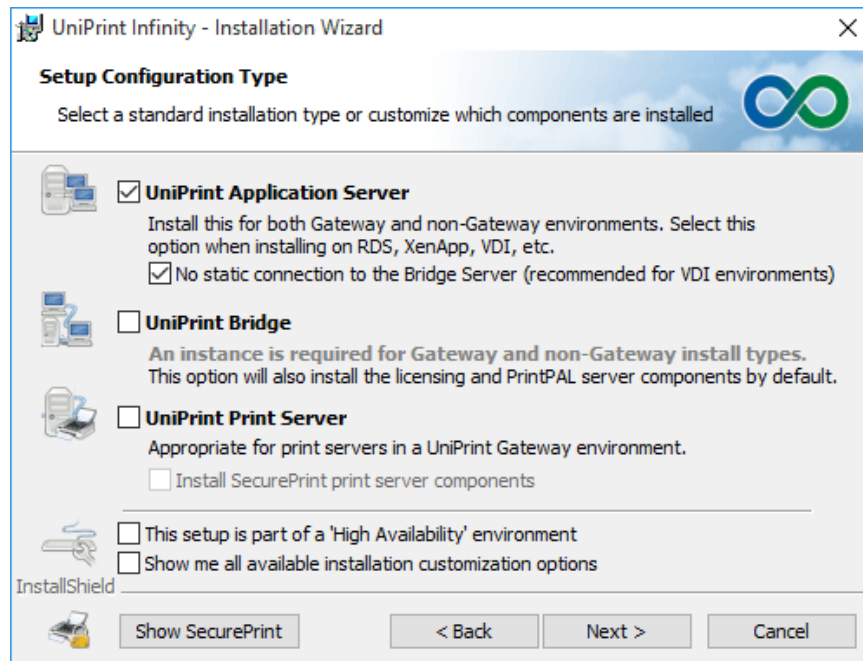


8. In the **Ready to Install the Program** dialog box, click **Install**. The UniPrint installer will copy files to the destination folder.
9. Click **Finish** to complete the installation.

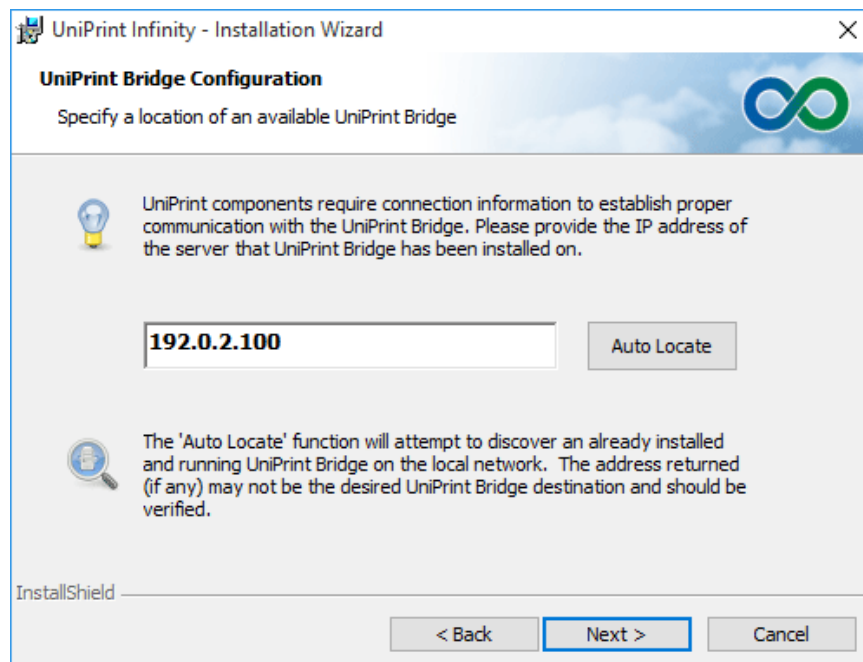
STEP 3: Install UniPrint Application Server On A PC/Workstation

1. On a workstation or PC, run the installation program **UniPrint91_*.exe** as an administrator.
2. In the **UniPrint Infinity Installation** dialog box, click **Next**.
3. In the **License Agreement** dialog box, click **I accept the terms in the license agreement** and then click **Next**.
4. In the **Destination Folder** dialog box, click **Next** to accept the default location for the UniPrint program files. Click **Change** to select a different location.

5. In the **Setup Configuration Type** dialog box, select **UniPrint Application Server** and **No static connection to the Bridge Server (recommended for VDI environments)**. Click **Next**.



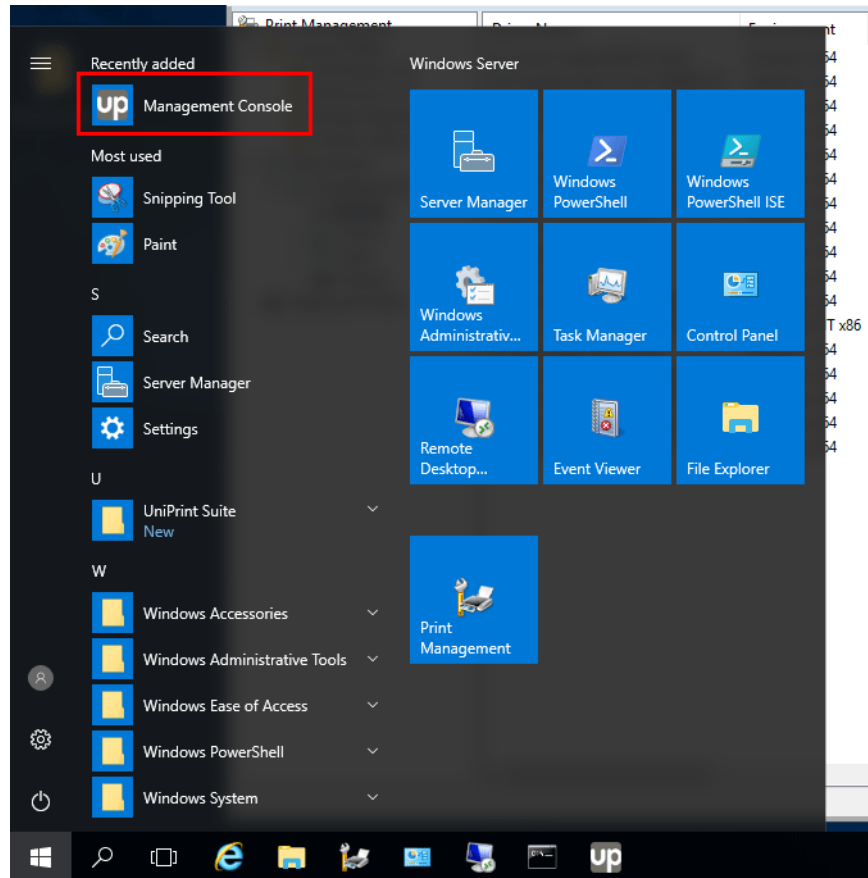
6. In the **UniPrint Bridge Configuration** dialog box, enter the public **IP Address** of the UniPrint Azure VM and then click **Next**.



7. In the **Ready to Install the Program** dialog box, click **Install**. The UniPrint installer will copy files to the destination folder.
8. Click **Finish** to complete the installation.

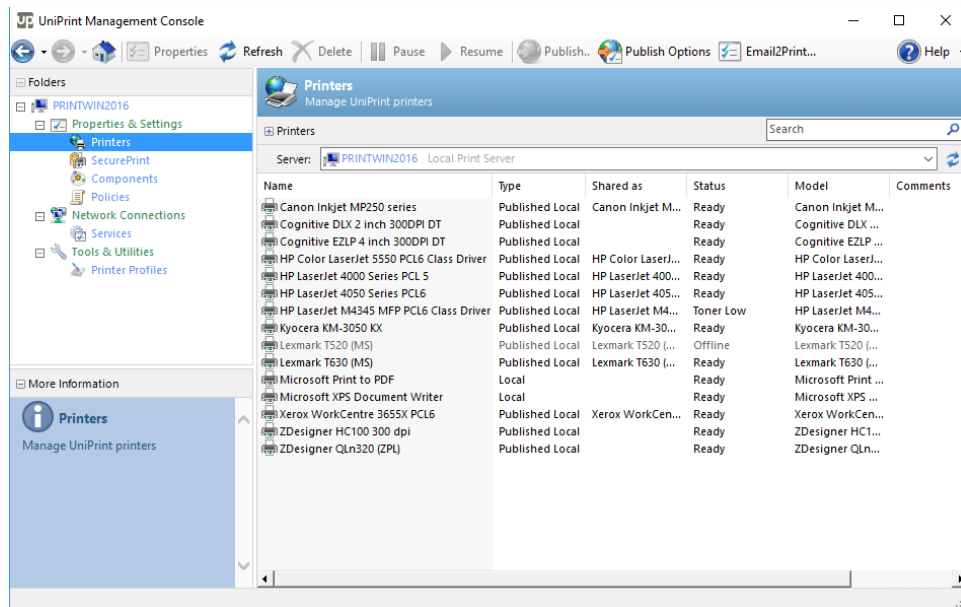
STEP 4: Install a Test Printer On The UniPrint Print Server

1. On the UniPrint Print Server, open **Print Management**.
2. Under the **Print Management** tree, expand **Print Servers** and then expand the local print server.
3. To add a new printer, right-click **Printers** and then click **Add Printer**. Follow the **Add Printer** wizard to install a new network printer.
4. Click **Start** and then under **Recently Added**, click **Management Console**.

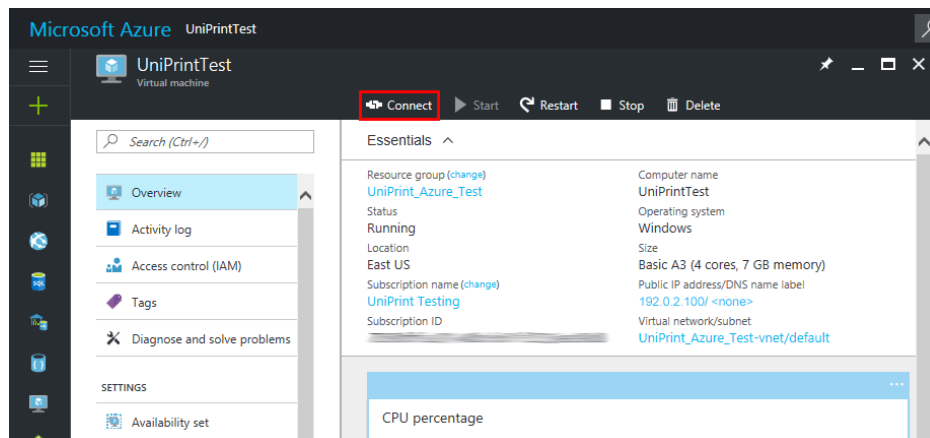


5. In the **UniPrint Management Console**, under **Properties & Settings**, click **Printers**.

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



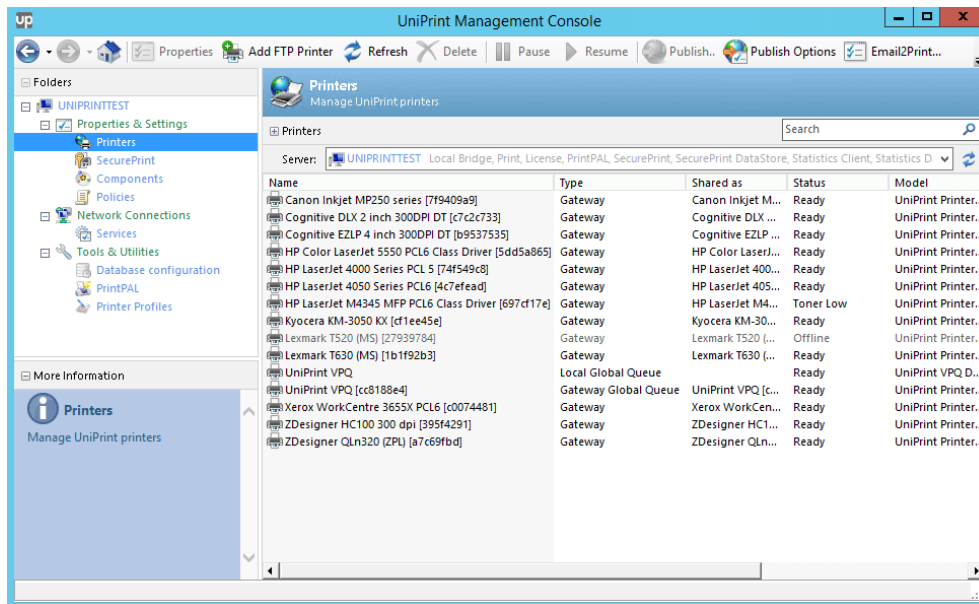
7. From the workstation, start a remote desktop connection to the UniPrint Azure VM. Use the **public IP address** and the **username** and **password** entered when creating the UniPrint Azure VM to connect. Alternatively, through the Azure Portal, click **Connect** to start an RDP session to the UniPrint Azure VM.



8. On the desktop, double-click **UniPrint Management Console**.

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

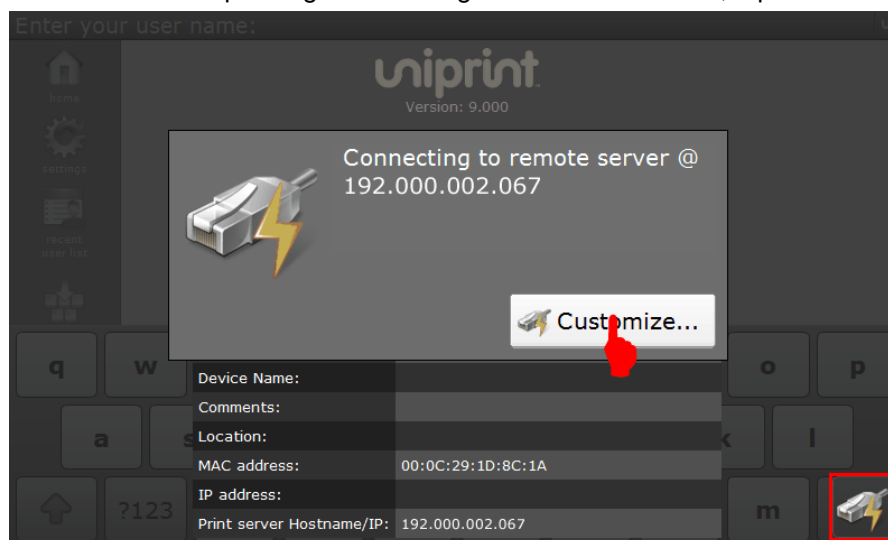
10. The new printer will appear in the printer list of type **Gateway**.

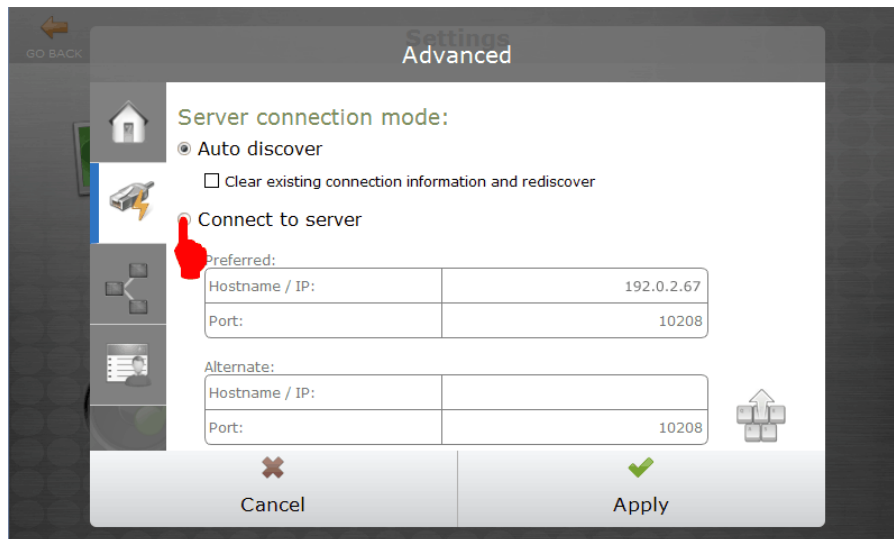
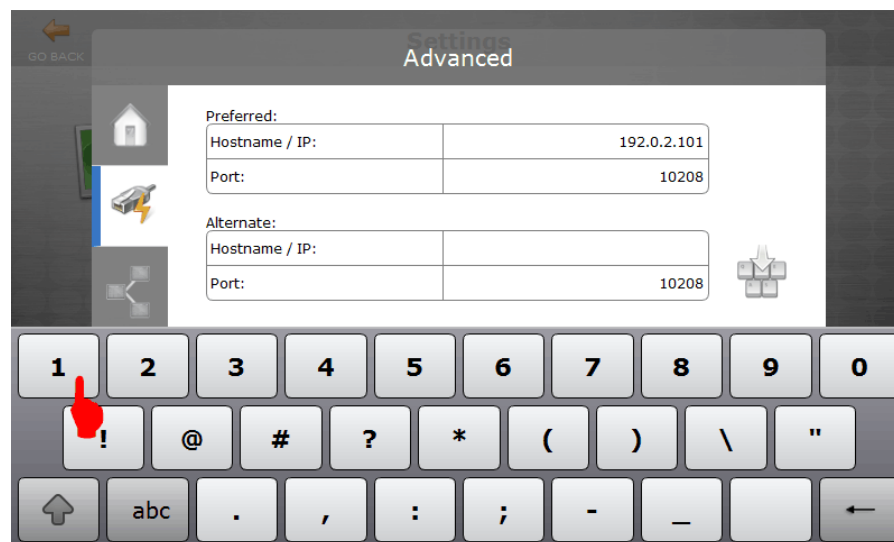
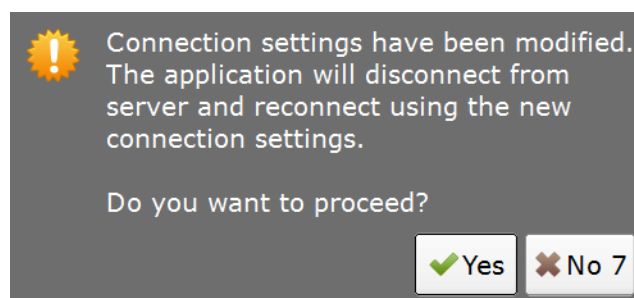


STEP 5: Install and Activate the SecurePrint Emulator

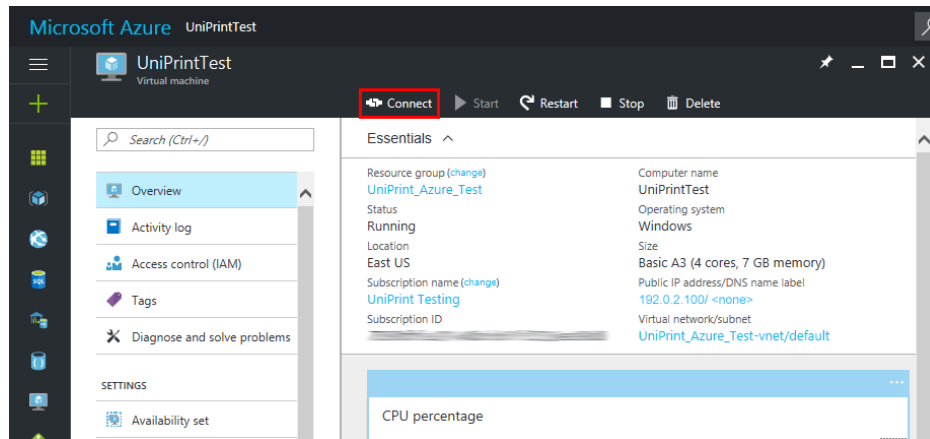
The SecurePrint Emulator can be run from any Windows machine. It does not have to be server-class, a client machine is acceptable. However, the machine must be connected to your network and visible to the UniPrint Print Server.

1. On a workstation, run the self-extracting executable file, **SecurePrint Emulator.exe** as an administrator.
2. Ensure that the vPad or emulator is connected to the correct UniPrint Print Server.
 - a. If the **Print Server IP address** is pointing to the wrong UniPrint Print Server, tap **Customize** or **Settings**.

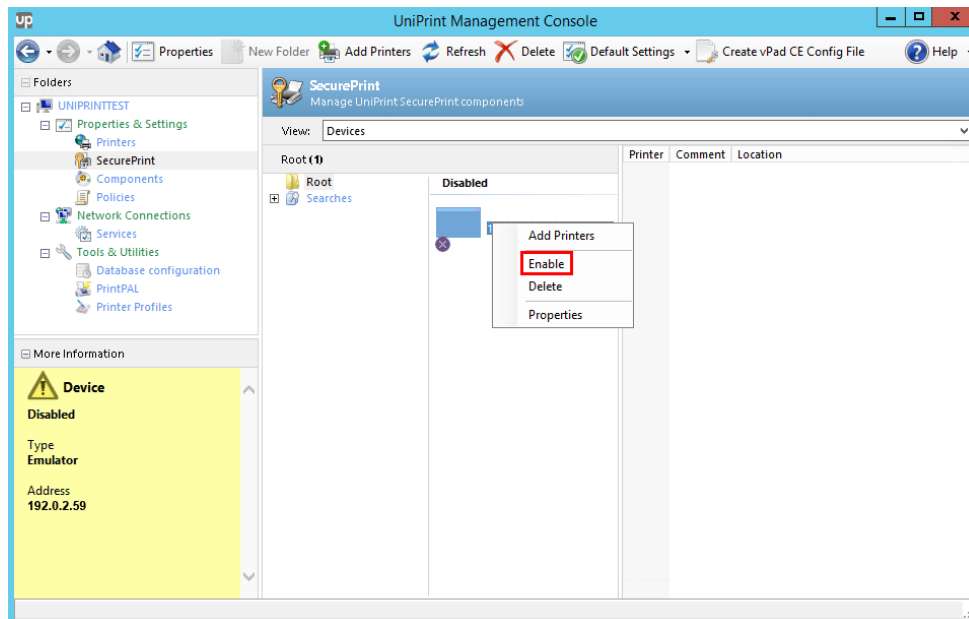


b. Tap Connect to Server.**c. Change the IP address and port number to that of the desired UniPrint Print Server and then tap **Apply**.****d. Tap Yes.**

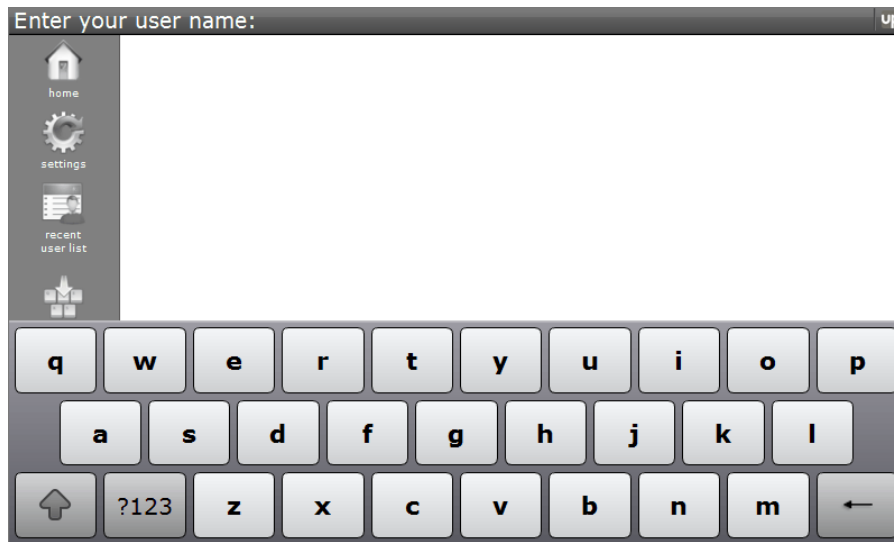
- From the workstation, start a remote desktop connection to the UniPrint Azure VM. Use the **public IP address** and the **username** and **password** entered when creating the UniPrint Azure VM to connect. Alternatively, through the Azure Portal, click **Connect** to start an RDP session to the UniPrint Azure VM.



- On the desktop, double-click **UniPrint Management Console**.
- Under **Properties & Settings**, click **SecurePrint**.
- Right-click the vPad or emulator device and then select **Enable**.

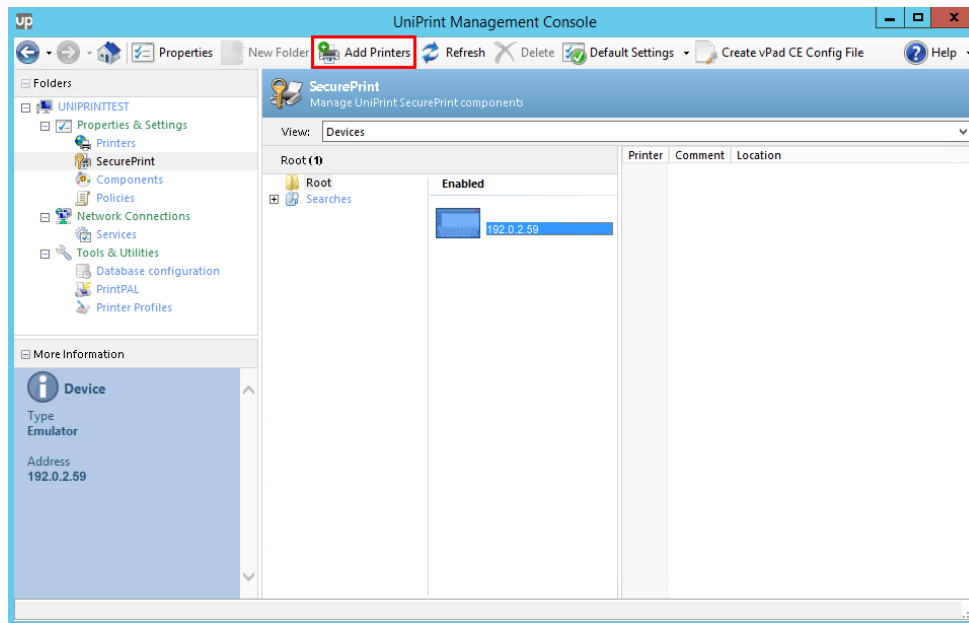


- Once enabled, return to the vPad or emulator and the user name entry screen should appear.

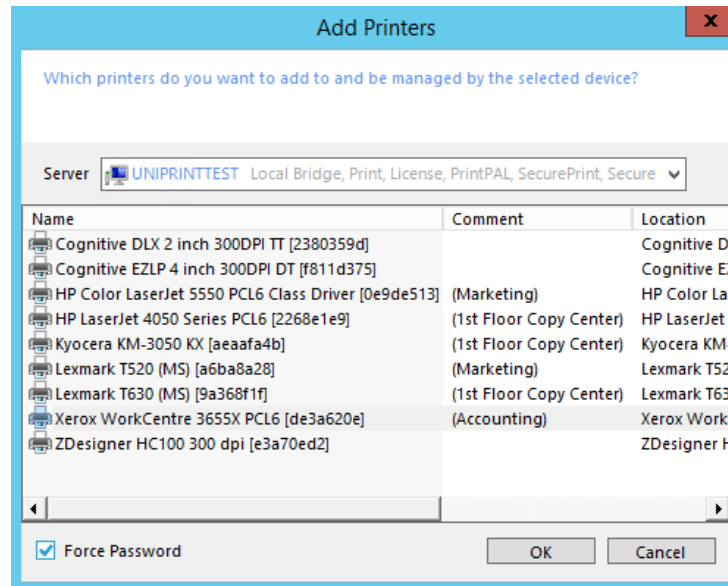


STEP 6: Add Printers to the SecurePrint Emulator/vPad

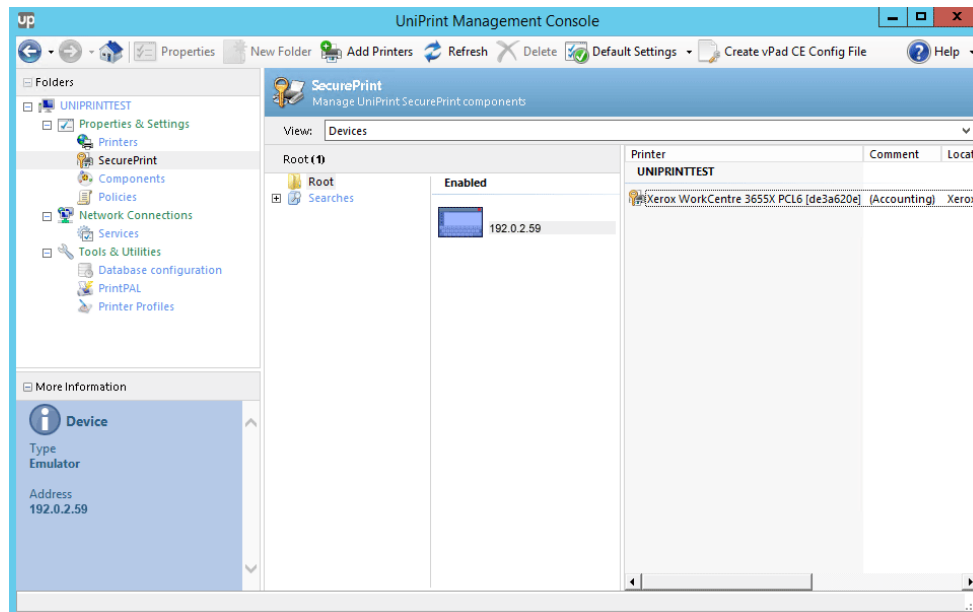
- On the UniPrint Azure VM, open the **UniPrint Management Console**.
- Under **Properties & Settings**, click **SecurePrint**.
- Click to select the enabled vPad or emulator and then click **Add Printers**.



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. Click **OK**.



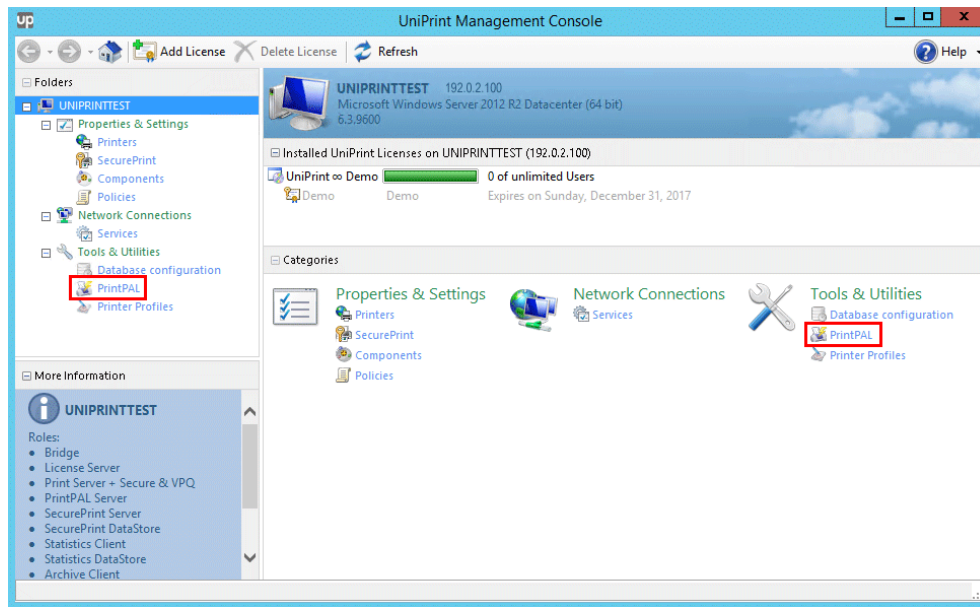
5. The selected test printer is now added to the SecurePrint Emulator/vPad and users will be able to release their print jobs to print at this printer.



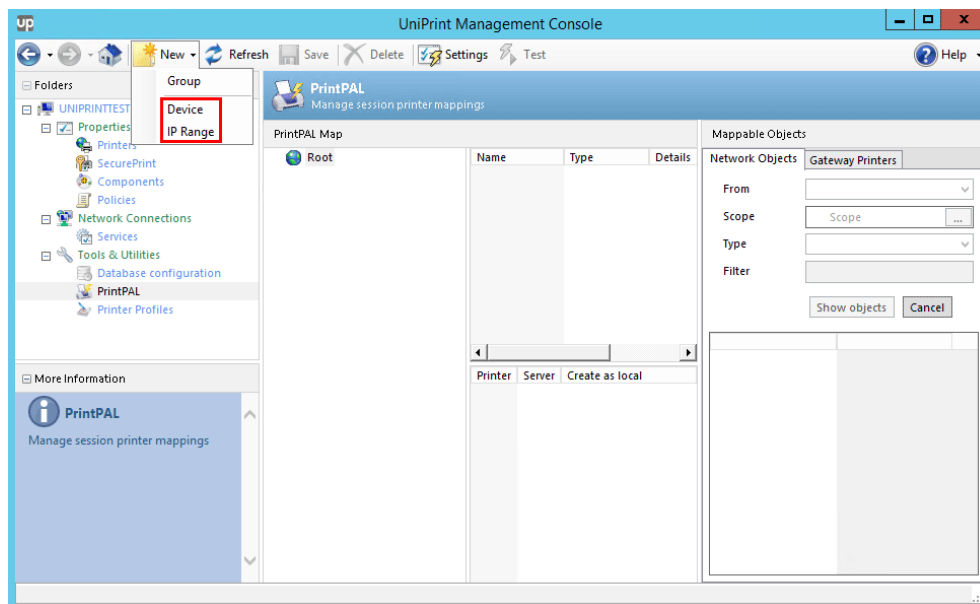
STEP 7: Use PrintPAL to Add the Test Printer and UniPrint VPQ In A User Session

1. On the UniPrint Azure VM, open the **UniPrint Management Console**.

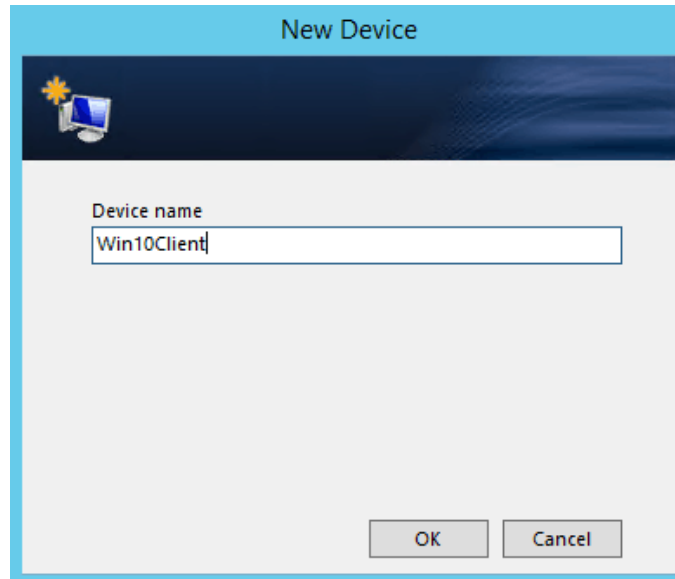
2. Under **Tools & Utilities**, click **PrintPAL**.



3. Click **New** and then click either **Device** or **IP Range**.



- a. For a device that is not part of a domain, enter the host name of the device and then click **OK**.



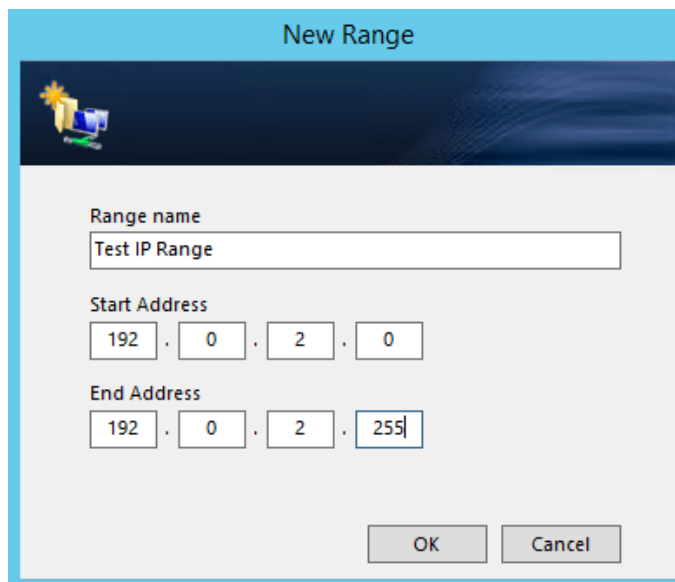
The 'New Device' dialog box has a light blue title bar and a dark blue header with a computer icon. It contains a text field for 'Device name' with the value 'Win10Client'. At the bottom are 'OK' and 'Cancel' buttons.

Device name

Win10Client

OK Cancel

- b. For an IP range, enter a name for the IP range and the starting and ending IP addresses. Click **OK**.



The 'New Range' dialog box has a light blue title bar and a dark blue header with a folder icon. It contains a text field for 'Range name' with the value 'Test IP Range'. Below are two rows of IP address fields: 'Start Address' (192, 0, 2, 0) and 'End Address' (192, 0, 2, 255). At the bottom are 'OK' and 'Cancel' buttons.

Range name

Test IP Range

Start Address

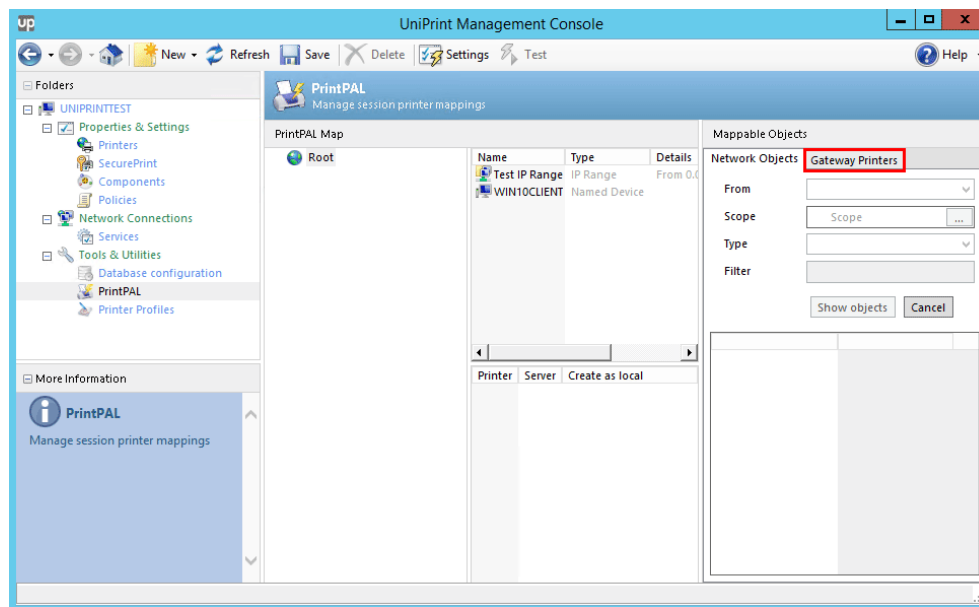
192 . 0 . 2 . 0

End Address

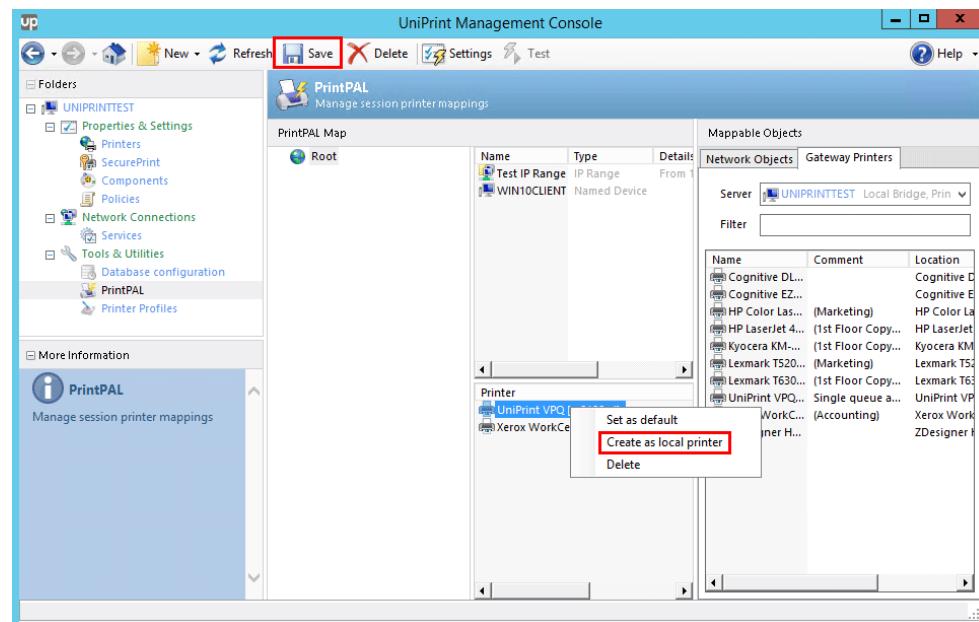
192 . 0 . 2 . 255

OK Cancel

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

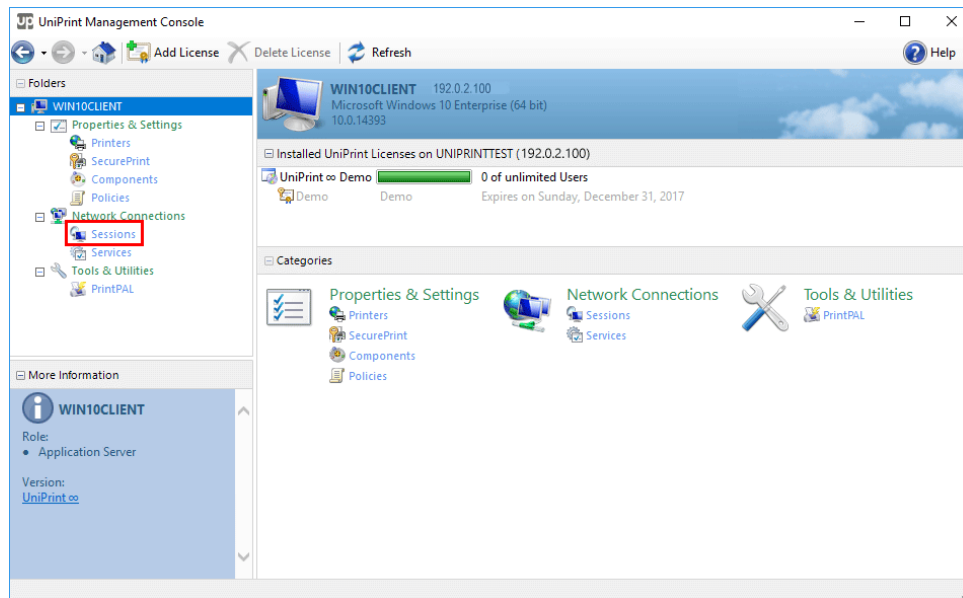


5. Click to select the UniPrint VPQ and then press **ENTER**. Repeat this step to add a test printer.
6. Right-click the UniPrint VPQ and then select **Create as local printer**. Do the same for the test printer and then click **Save**.

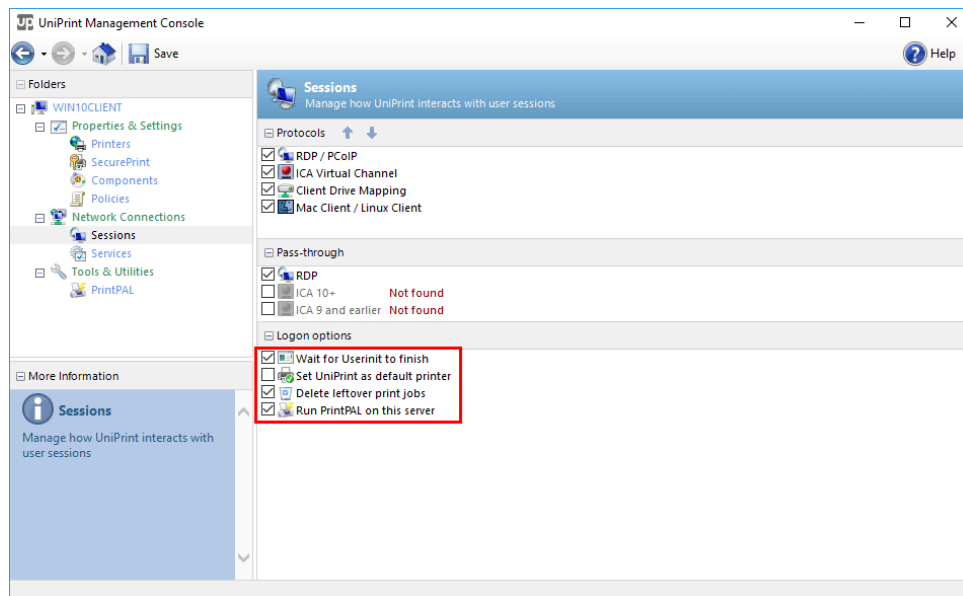


7. Logout of the RDP session.
8. On the workstation, open the **UniPrint Management Console**.

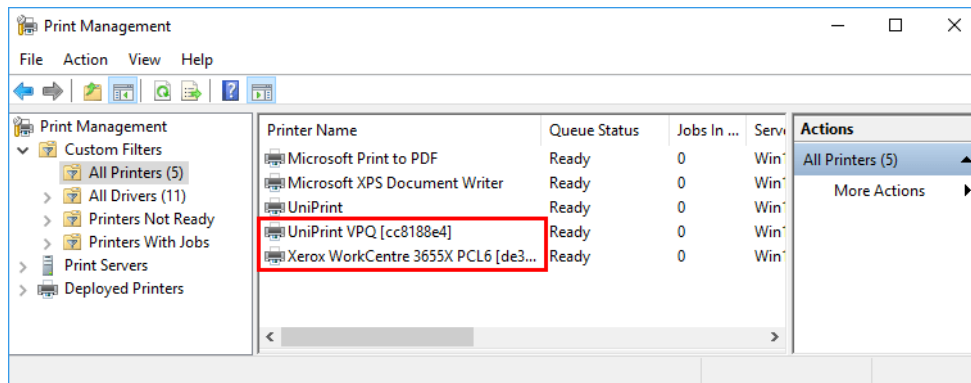
9. Under **Network Connections**, click **Sessions**.



10. Under **Logon options**, clear **Set UniPrint as default printer**. Select **Delete leftover print jobs** and **Run PrintPAL on this server**. Click **Save**.

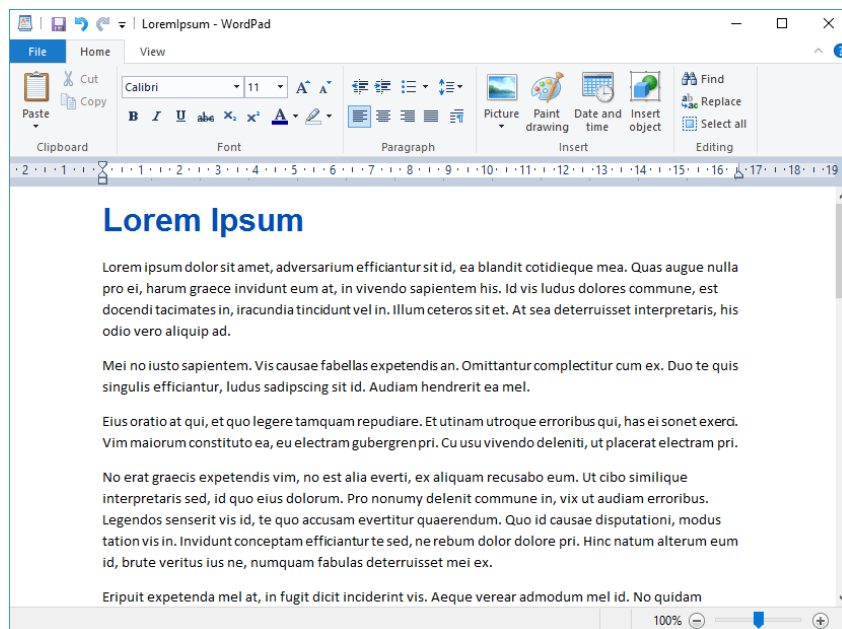


11. The UniPrint VPQ and test Gateway printers are now added to the workstation and are now available for printing.

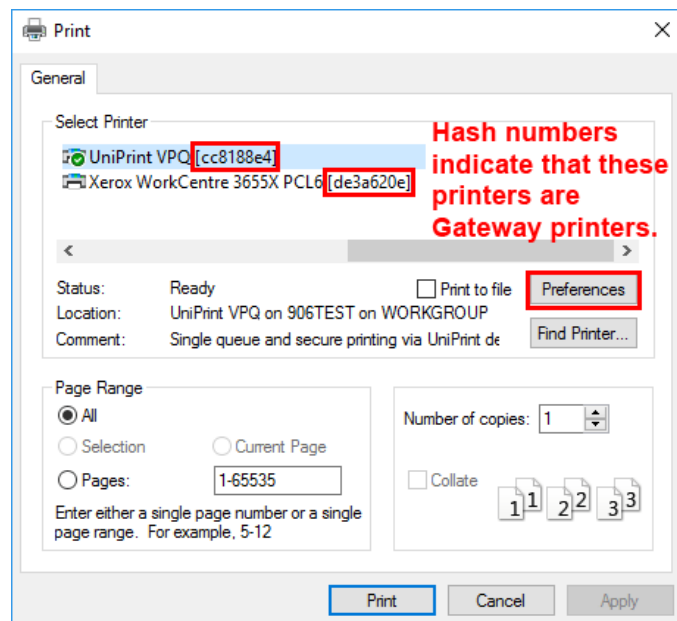


Printing & Releasing a Print Job With The UniPrint Azure VM

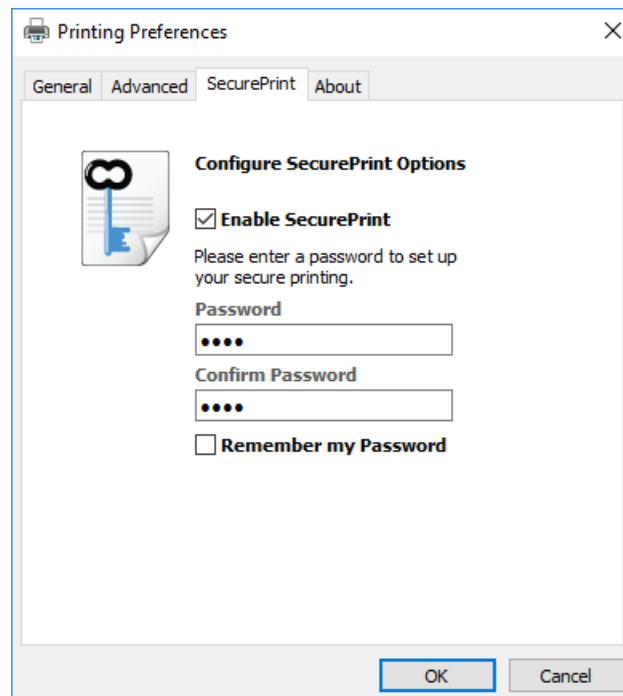
1. From the workstation or PC, open an application from which to print, for example, WordPad.
2. Print from the application. For example in WordPad, click the **File** tab and then click **Print**.



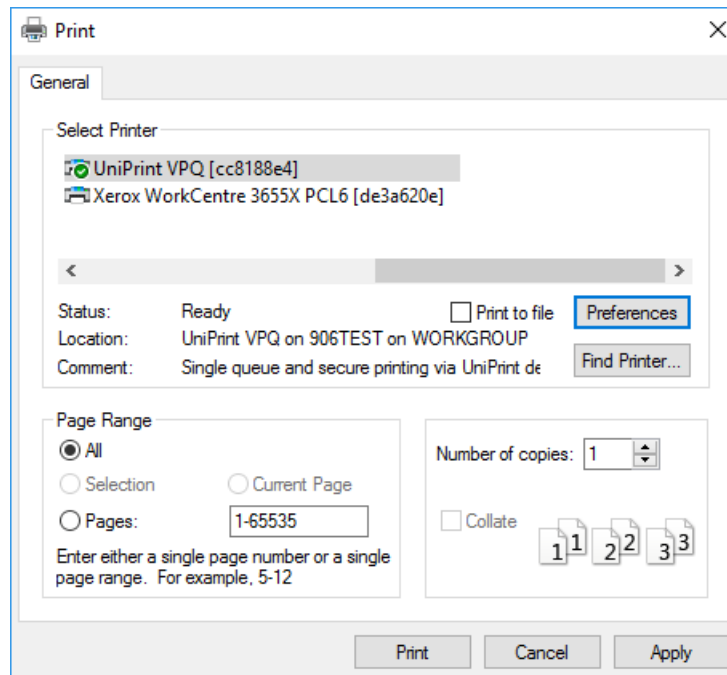
3. Select either the UniPrint VPQ or the test **Gateway** printer (one with the hash numbers) and then click **Preferences**.



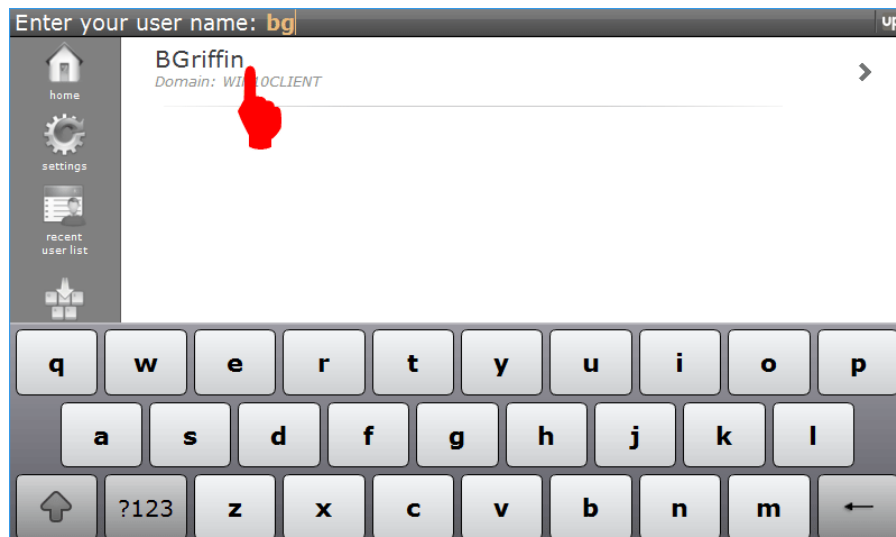
4. Click the **SecurePrint** tab. Click **Enable SecurePrint** and then enter a SecurePrint password twice. **Note:** Do not forget your password. This password is associated with each individual print job and there is no way to retrieve a forgotten password. To apply the same password to all SecurePrint print jobs from this print job forward, click **Remember my Password**. Click **OK**.



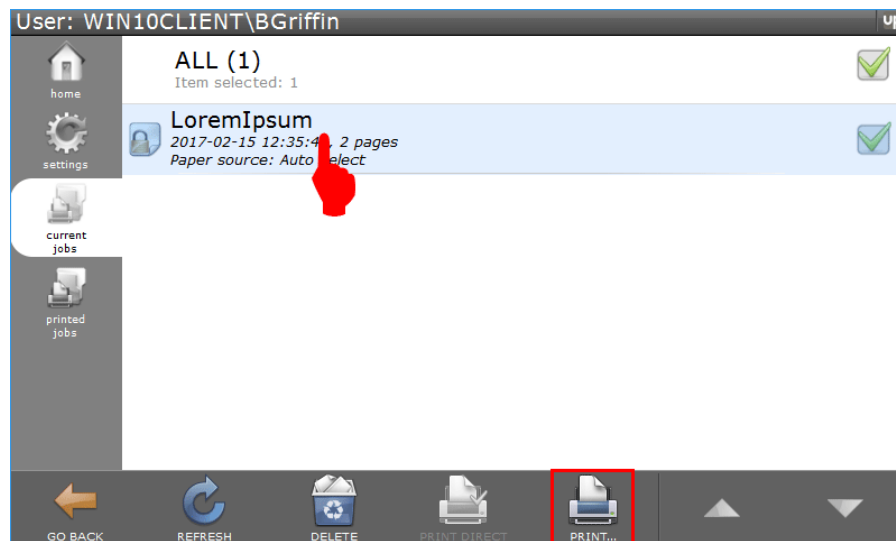
5. Click **Print**.



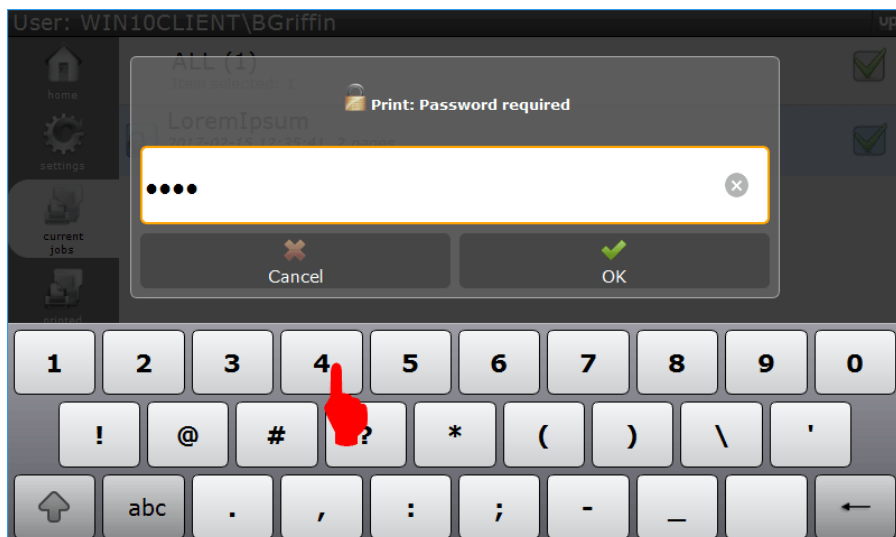
6. To release the print job, go to the SecurePrint Emulator or UniPrint vPad. Tap the keyboard to start entering your user name and then tap to select your user name to get a list of print jobs sent through SecurePrint.



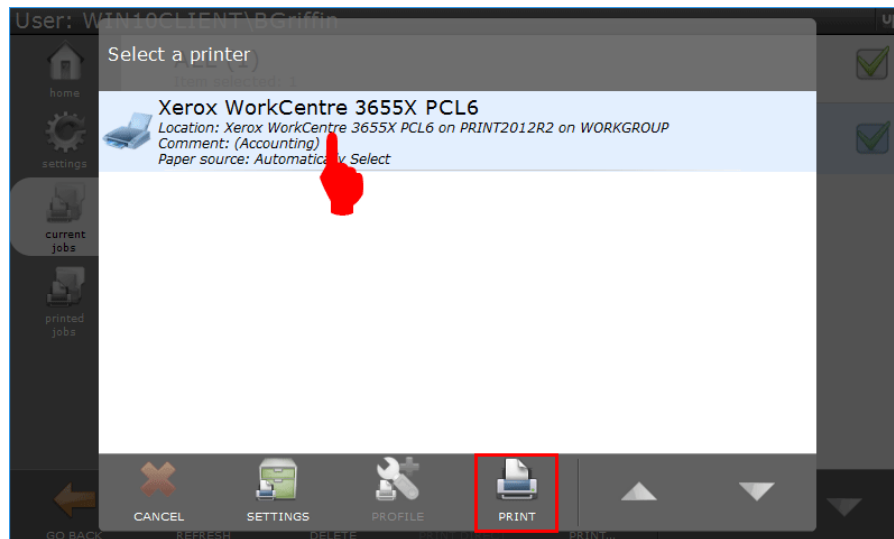
7. Tap to select the print job to be printed and then tap **Print**.



8. Enter the SecurePrint password and then tap **OK**.



9. Tap to select a printer to print to and then tap **Print**.



10. The document will be printed with a watermark across each page. To remove this watermark, contact sales@uniprint.net to request a demo license.

