



Networking for Wide Format Printers



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Networking for Wide Format Printers

It doesn't matter which RIP software package you are running Onyx, Scanvec, Wasatch, RasterLink or any other Raster Image Processor. These packages all work relatively the same. They install on a PC and create a Virtual Printer so you see a printer in the Devices & Printers area in Windows and create a Hot Folder which is where the Virtual Printer points to. When the RIP is running it monitors the Hot Folder for a job. If it finds a job, it'll start processing it and moves it out of that folder into a work area. See the last page for more details.

Installation of any of the RIP software requires a few options configured in Windows. The first and most critical is the user account on the Windows PC needs Administrative Privileges enabled. The second is UAC control needs to be disabled. You also need to disable any Anti-Virus software for the installation. If you re-enable it after installation you need to add an exception for the folder that contains the RIP. The next configuration change is if you plan on sending files from a Mac to the PC you need to enable LPD Printing services on the PC. The last change needed is establish a Static IP address on the PC. All of these steps with screen captures follow.

Configure PC before RIP installation



User Accounts and Family Safety

- Change account type
- Set up Family Safety for any user

On the PC go to the Control Panel and select User Accounts

Control Panel Home

Manage your credentials

Create a password reset disk

Configure advanced user profile properties

Change my environment variables

Make changes to your user account

Make changes to my account in PC settings

Change your account name

Change your account type

Manage another account

Change User Account Control settings

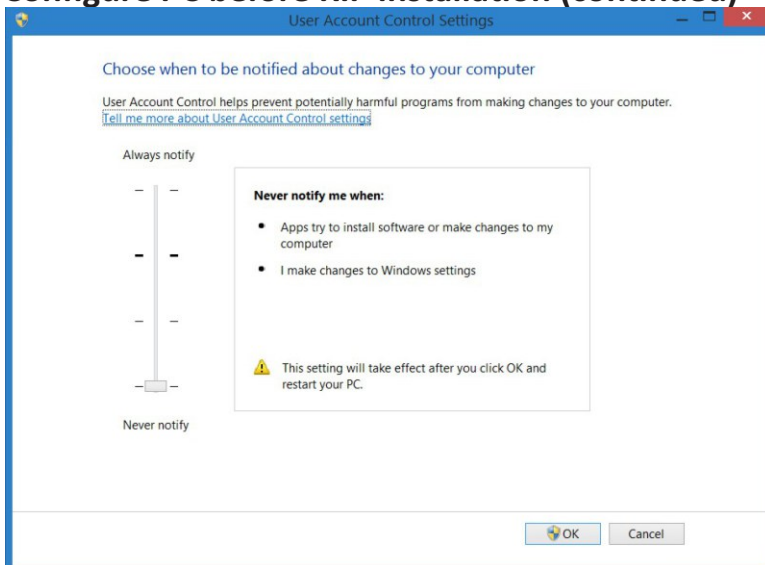


Verify the user account on the right of the image above states Administrator. If it does not, your IT department needs to be involved to setup an account which has Administrative Privileges. Please contact them to preform the following steps.



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Configure PC before RIP installation (continued)



Go to User Account Control Settings next and verify the slide is down to Never Notify. Select OK and you may be prompted to Restart your computer before it becomes effective. You can put off the Restart until you finish all the following prep work, but you should restart before you install the RIP software.

Disabling the Anti-Virus software can not be covered in this document. There are too many software packages with too many configurations to cover. You need to check with your IT department or the Anti-Virus software manufacturers manual to temporarily shut it down for the installation.



Programs
Uninstall a program

From the Control Panel select Programs.

Perform this following stage if a Mac will print to the RIP

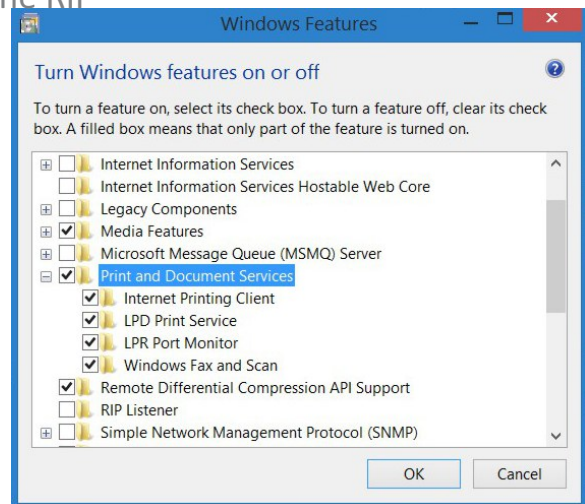
Control Panel Home

View installed updates

[Turn Windows features on or off](#)

On the left of the Control Panel select Turn Windows features on or off.

A new window opens (shown right). Scroll to Print and Document Services and click on the sign to expand. Click on the check box for LPD Print Service and LPR Port Monitor. Now select the OK button.





Restart the PC. Verify the Anti-Virus software is disabled, and install your RIP software. Follow the manufacturer directions for installing the RIP.



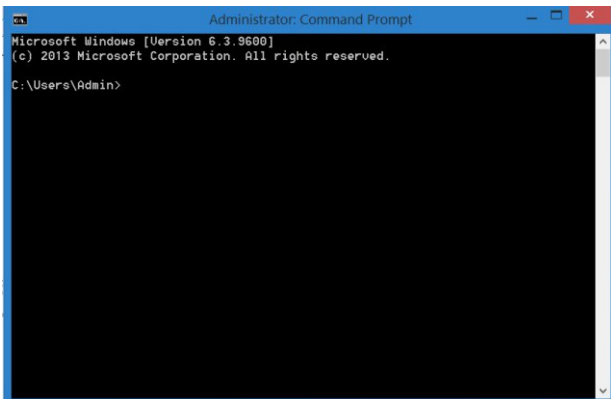
Networking for Wide Format Printers

Verifying Your Network Settings for Mac Communication

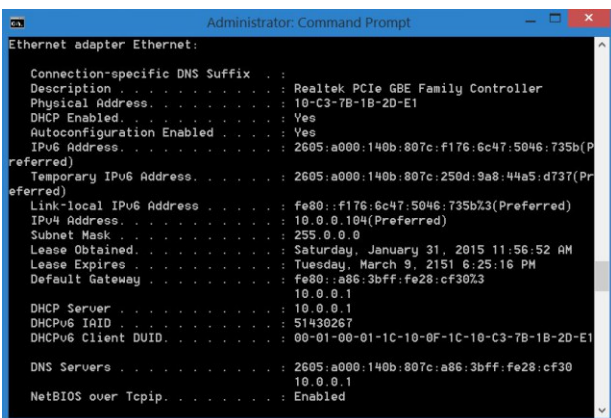
If there are no Mac's that will be communicating to the RIP you can skip this step. If you are on a corporate network controlled by your IT department you need them to supply you with a Static IP address, Subnet mask, Gateway and DNS server before proceeding to Changing Your Network Adapter For Mac Communication. If you are in a small business environment proceed with the next steps.

Our first step is going to the Command Prompt. This will vary based on the Windows version you have. For Windows 8 or higher select the down arrow at the bottom left  on you Start page. In the top right you will see a search box  just type "cmd" without the quotes and search. Now select the App called Command Prompt. From Windows 7 or earlier open the Start button and then Run. Type "cmd" again without the quotes.

A Black window will open.



At the blinking cursor type "ipconfig /all" without the quotes. The window will display all of your Network Adapter setting. Scroll through the setting and locate Ethernet adapter Ethernet: or Local Area Connection for Windows 7 or earlier.



DHCP Enabled state Yes which means every time your PC is started the Router will assign a new IP address to your PC. This may not happen all the time, it's dependant on the order that other PC's and printers are turned on. Power failures will really effect this.

Write down the following data for your system.

- IPv4 Address (sample here is 10.0.0.104)
- Subnet Mask (sample here is 255.0.0.0)
- Default Gateway (sample here is 10.0.0.1)

IPv4 Address _____
 Subnet Mask _____
 Default Gateway _____

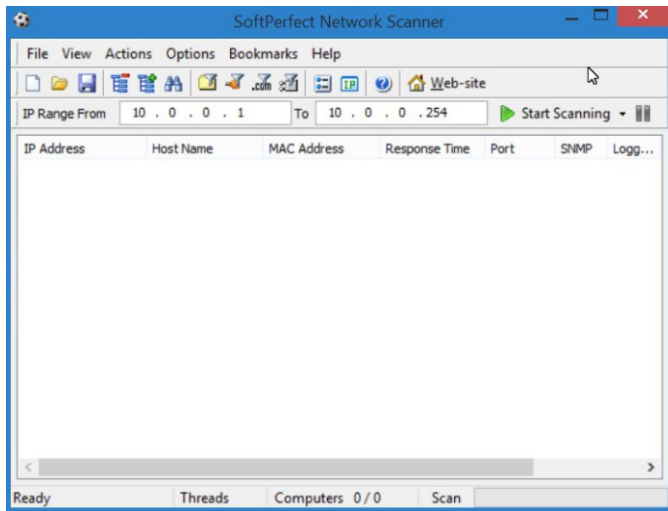


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Changing Your Network Adapter for Mac Communication

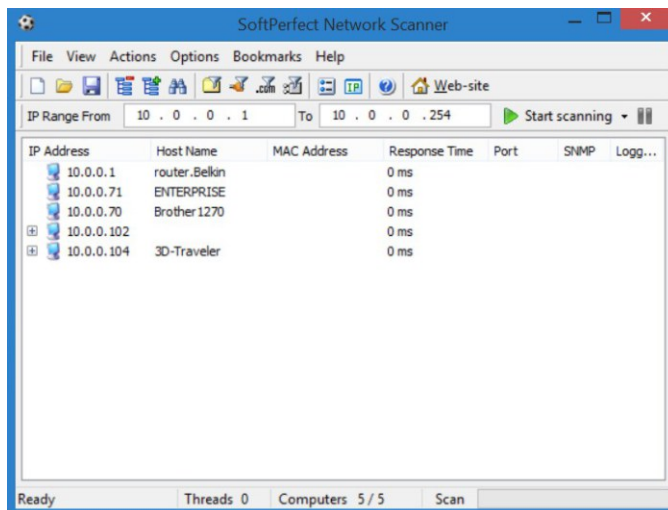
If you have an IP address from your IT Department skip to the next page.

We need to see what else is out on our network. There is a little freeware utility that will help us with that. It's called NetScan which can be downloaded from <https://www.softperfect.com/products/networkscanner/>. Download, install and run this software.



The screen shot on the left shows the application. You need to add the IP range that you wish to scan. Take the first three sets of numbers from the previous page for IPv4 Address. The forth number (octet) should be a 1, in the To section add those same first three sets of numbers and for the forth octet make it 254.

Before you select the Start Scanning button make certain that most of your computers and printers in the office are turned on.



The list populates with everything connected to your network.

In the example on the left, we see a pattern. I know that the 4th octet jumps from 71 to 102. I know my PC is set to DHCP, which means my router assigns IP address' starting at 102. I also notice that my last item in the list is 104.

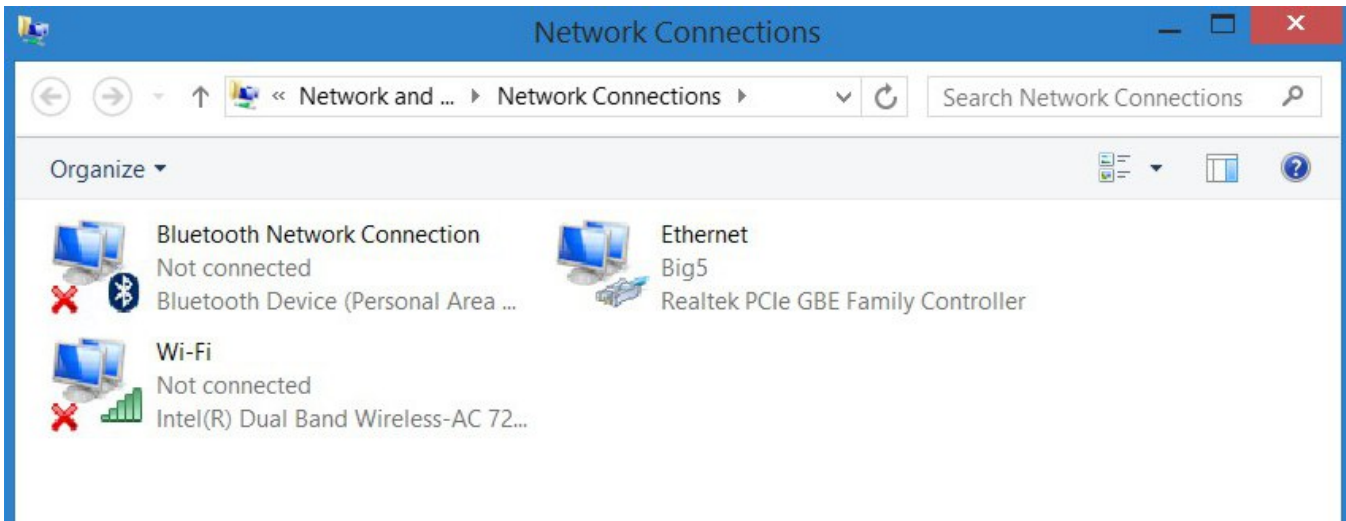
We can safely assume that DHCP starts around 100. Items below that are probably Static IP's.

We could set the Static IP for the PC to 99 or 254. It's your call.

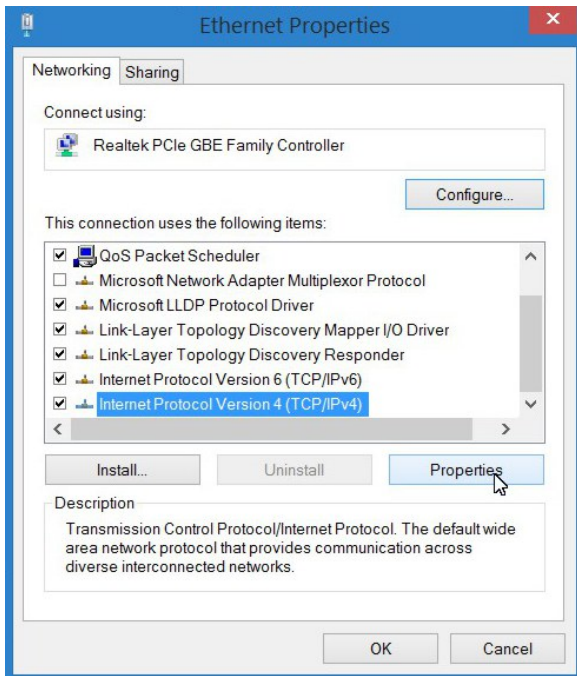
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Changing Your Network Adapter for Mac Communication (continued)

Go to your Control Panel and select Network. In the left panel select Change adapter settings. The following window appears. In Window 8 or higher you should see Ethernet, in Windows 7 you would see Local Area Connection.



As a note the red X's above indicate that those connections are not active. Right click on the active connection and select Properties. In the next window select the Properties button . A new window appears.

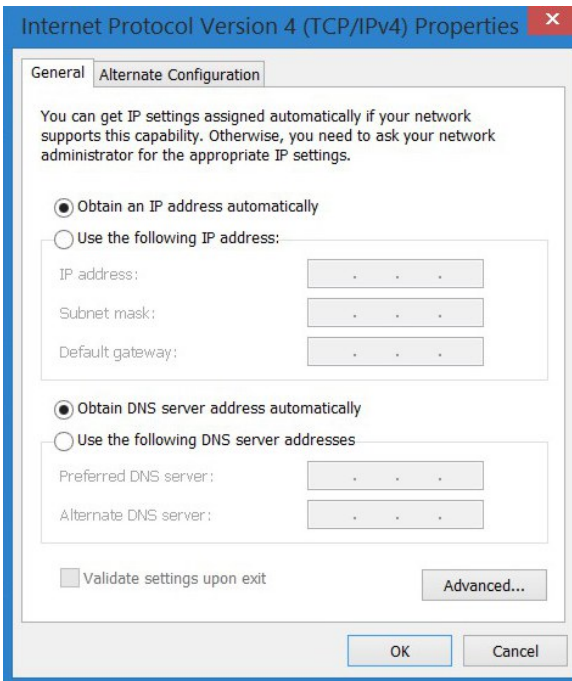


Scroll down the list and highlight Internet Protocol Version 4 (TCP/IPv4). Select the Properties button.

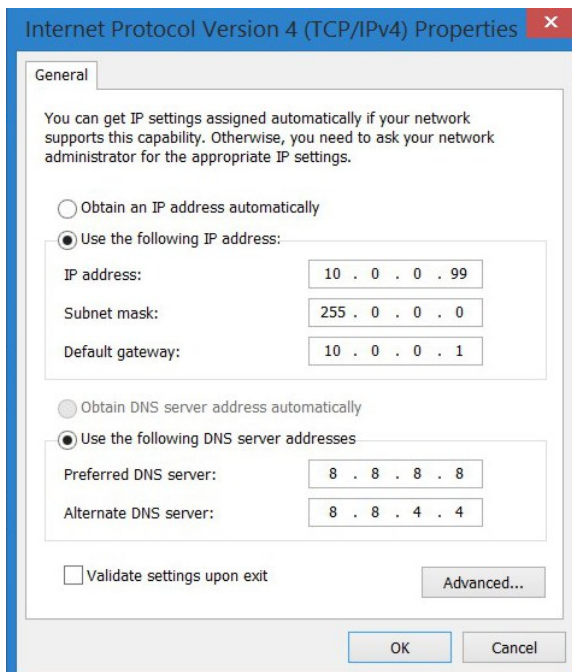


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Changing Your Network Adapter for Mac Communication (continued)



The window on the left appears. Select the radio button "Use the following IP address".



Enter your new configuration. You will notice on the example on the left we chose 99 for the final octet.

Depending on your router or other network settings, you may need to add a DNS (Dynamic Name Server). This is where your computer looks for things on the Internet. In your Browser when you type `http://google.com` how does it know where to go. Your computer does not know the IP address of Google. That's where DNS comes in. In the background the request for google checks at the DNS server which translates the name to an IP address 74.125.224.72.

If you do not have one and you need to enter a set of numbers, make use of Google's DNS servers.

8.8.8.8
8.8.4.4



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Changing Your Network Adapter for Mac Communication (continued)

OK and Close your way out of all the windows that are opened. Open your Browser and enter <http://bigsys.com>. If everything went OK you should see the Big Systems Web Site.

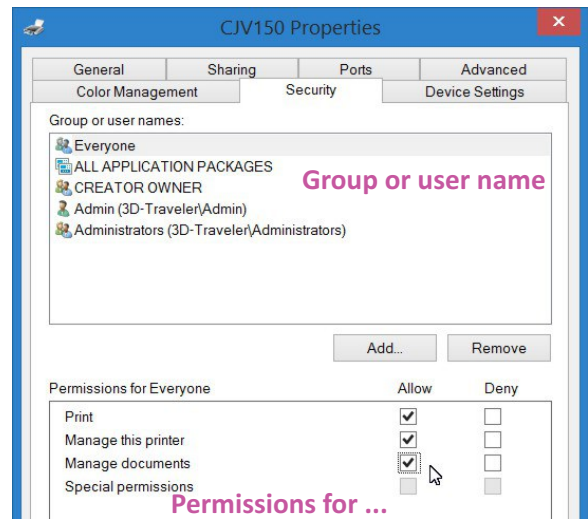
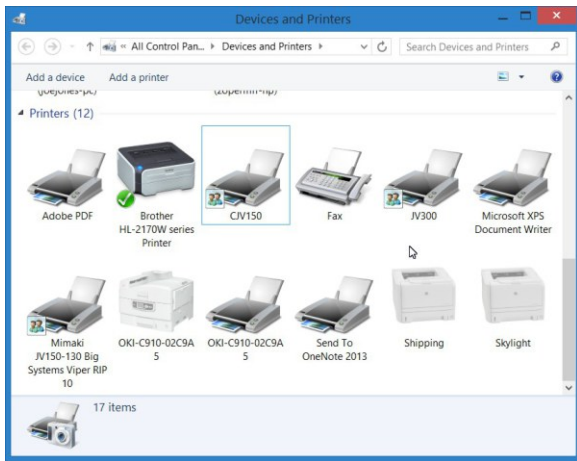
Something Went Wrong

Go back to page 5 and repeat the process again. Verify your IP address'. There should not be leading 0's. If you are entering 000 for one of the octets, just change it to 0. If that still does not correct the problem go back to page 5 and at page 6 and select "Obtain an IP address automatically" and "Obtain DNS server address automatically". Contact an IT professional to assist before you continue any further though this document.

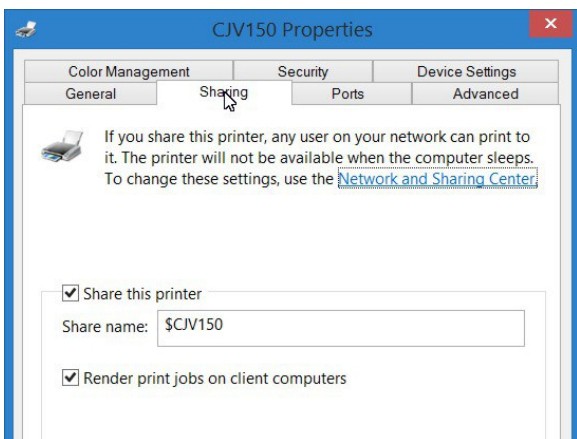
Networking for Wide Format Printers

Setting Some Permissions

Go to the Control Panel->Devices and Printers. Right Click on the printer you installed and select Printer Properties. Now select the Security Tab. If you installed Wasatch see the Addendum on page 15 and skip this page.



Highlight each one of Group or user names. As you select each one, the Permissions are listed. Make certain all Permissions are set to Allow.



Go to the Sharing tab. Make certain the Share this printer box is checked as well as the box for Render print jobs on client computer.

Write down the Share name. You will need this for the Mac. Select the OK button at the bottom to accept your changes.

Repeat this page for each Printer you have installed in the RIP.



Networking for Wide Format Printers

Collecting Data

Collect the following data before proceeding.

Collect the following data before you proceed.

IP Address of PC _____

Login Name _____

Login Password _____

Share Name for the Printer _____

Computer Name _____

User Name & Password for Program installation on each Mac. Write it in pencil so you can make changes.

Name of Mac
Identity "Jims", "Mac1"

Username for Login
Login Name

Password for Login
Password to install applications

Name of Mac Identity "Jims", "Mac1"	Username for Login Login Name	Password for Login Password to install applications

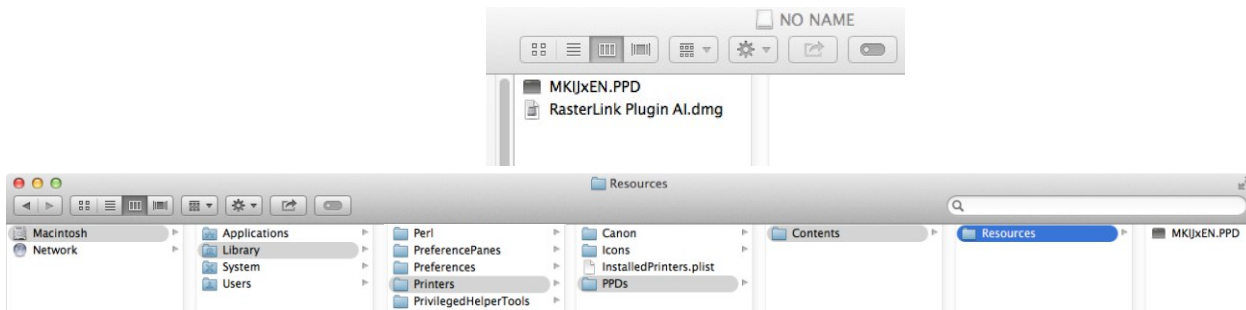


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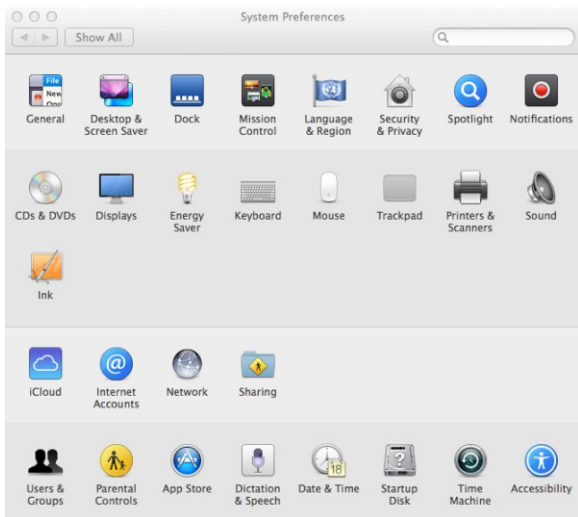
Installing Printer on a Mac



Open your Memory Stick. Copy the MKIJxEN.PPD to
Macintosh->Library->Printers->PPDs->Contents->Resources



Go to ->System Preferences and select Printers & Scanners. Select the + sign in the next window.



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Installing Printer on a Mac (continued)

Select the IP icon.

Enter Your IP Address, Queue is the Share Name, Name is what ever you want to recognize the printer to by.

For Use, select the pull down, select your printers name It may be prefixed by the RIP name. Now press the OK button.

Finish by selecting the Add button in the next window.

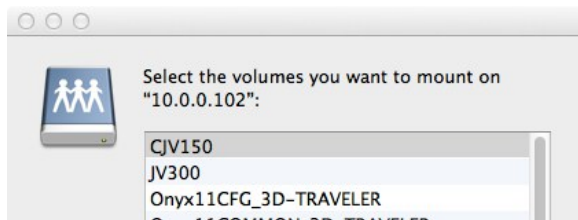
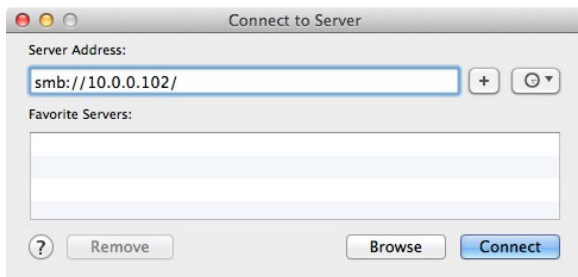


Networking for Wide Format Printers

Connect to Server for Hot Folder Printing on a Mac



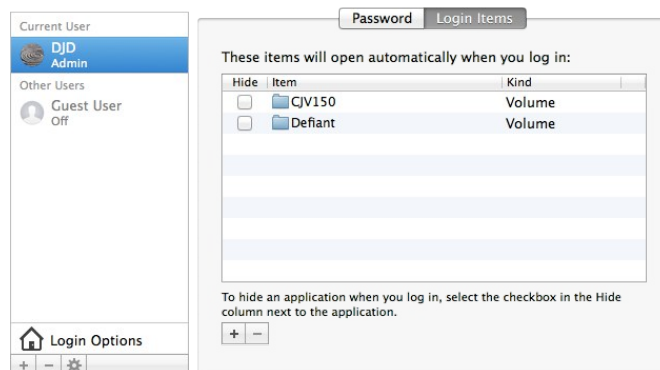
Go to Connect to Server and enter smb://IP Address of RIP Pc PC. Select Connect as Guest.



Select the folder that is the name of your printer, then the OK button. You should now see the connection on your Desktop.



Go to ->System Preferences and select Users and Groups.



Select the Login Items tab and add the volume. This will place the link on your Desktop the next time you start your Mac.

Click the lock to make changes.



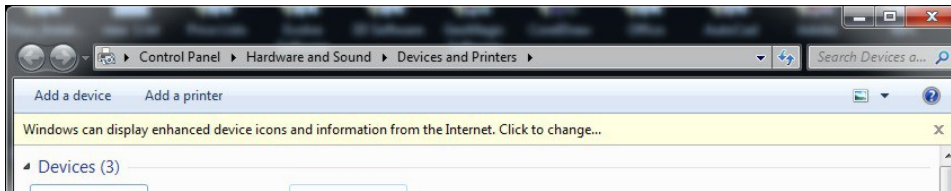
Repeat the last three pages for each Mac that requires printing access to the RIP.

Networking for Wide Format Printers

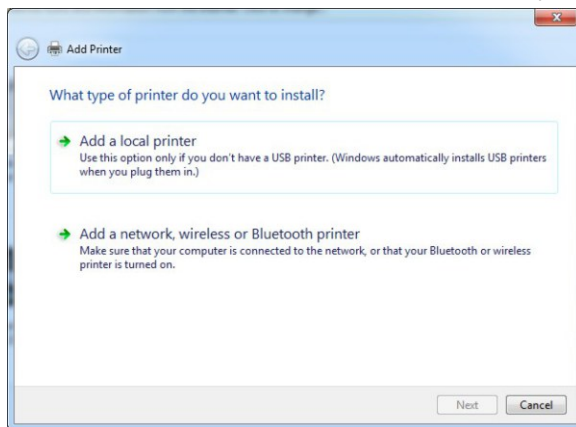
Installing Printer on Another PC



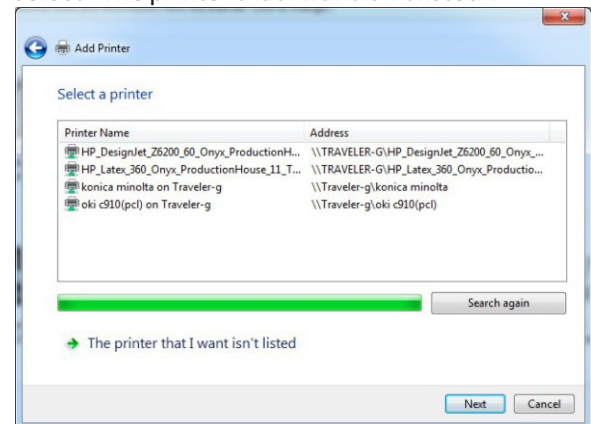
Open the Devices and Printers window via the Control Panel and select Add a printer.



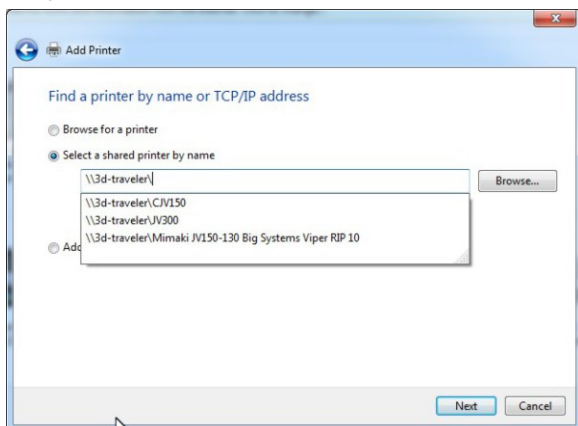
Select Add a network, wireless or Bluetooth printer.



If the printer is shown in the list select it. If it is not select "The printer that I want isn't listed".



If selected "The printer that I want isn't listed" we will need to Browse for the printer or type in \\Computer Name (collected on page 8)\ the list should display available printers on that computer. If connected it should display the printers available. You can also add the share name after the Computer Name. If not connected, you may need to enter the User Name and Password for the PC that has the RIP. Then you should see the printer



OK your way through the remainder of the installation process to complete adding a printer on your remote PC.

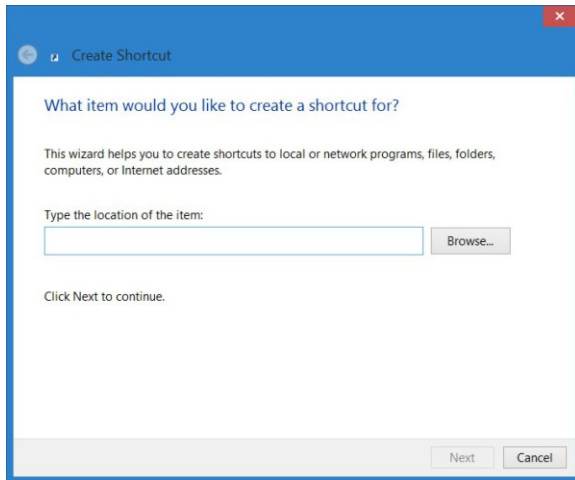


Networking for Wide Format Printers

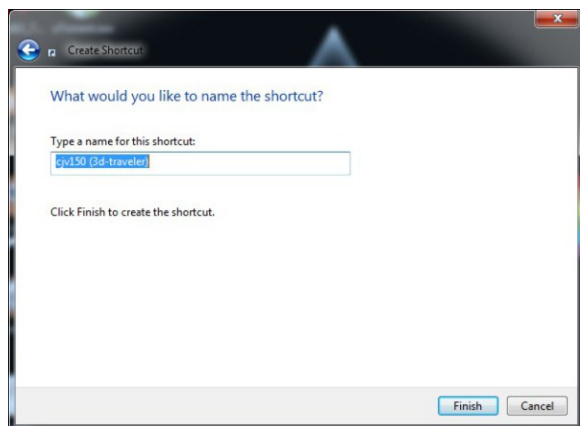
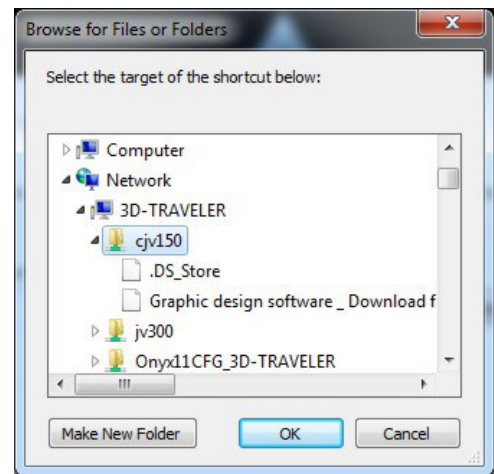
Connect to Server for Hot Folder Printing on Another PC



Right click on your Desktop and select New->Shortcut. Now select the Browse button.



In the sample below you need to select Network->Computer Name-> Printer name.



You now have a prompt that allows you change the name of the link. Some RIP software adds lots of un-needed name information. You can shorten it here.

Finish by selecting the OK button above, and change the name if desired in the image on the left. Your shortcut should appear on the desktop.



Repeat the last two pages for every PC that requires printing access to the RIP.

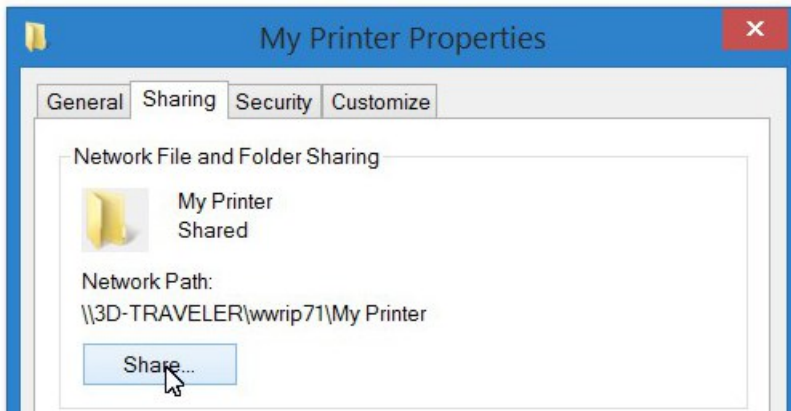
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Addendum

Wasatch

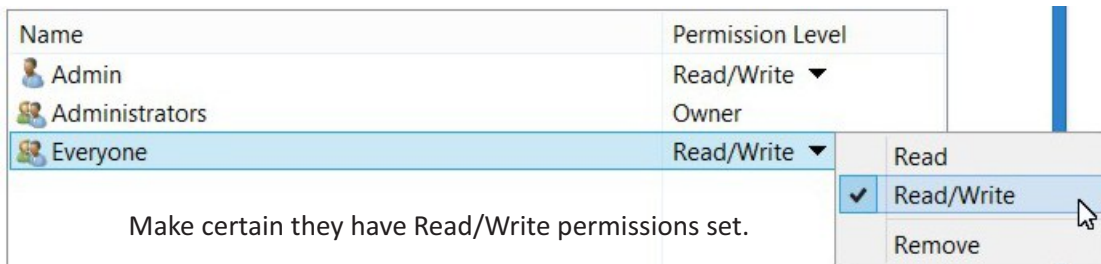
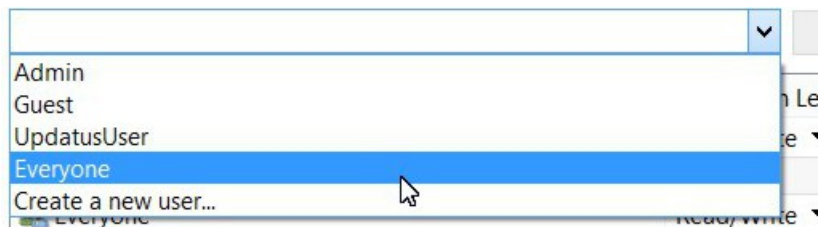
Wasatch does not create a Printer in the Device & Printers list. We do not support it but there is an open license software package called Ghostscript that can possibly work. It will only support a print no longer than 78 inches. We do not support Ghostscript. Installation instructions follow on the next page.

Wasatch does not create a Hot Folder when you installed the software. We recommend you create your own. Open This PC or My Computer and browse to C:\wwrip71. Right click and select New->Folder. Name the Folder the name of your printer. Enter the folder you just created.



Right click and select Properties. Then select the Sharing tab on the top of the dialog box as shown on the left. Click the Share button.

Select the pull down and select Everyone or Guest.



Make certain they have Read/Write permissions set.

Select the Share button on the bottom of the dialog. You have successfully created a share.

In Wasatch go to Server->Hot Folder. Check the boxes Active and Create Preview Image. For Hot Folder browse to the folder you created above C:\wwrip71\My Printer. You now have a Hot Folder created.

Networking for Wide Format Printers

Addendum

Ghostscript

Download and install the two following files:

<http://sourceforge.net/projects/mfilemon/>

<http://www.ghostscript.com/download/> Select the Postscript and PDF interpreter/renderer

If printer on Windows 8.1

Open the charms menu (move mouse to upper right corner of screen to make it appear).  + C

Select Settings->Change PC Settings->Update and recovery->Recovery->Advanced startup->Restart Now

Select Troubleshoot->Advanced Options->Start Settings->Restart

Press 7 "Disable Driver Signature Enforcement"

Once restarted you are ready to install a Ghostscript printer.

Installing a printer

Control Panel->Devices and Printers->Add Printer

The Printer that I want isn't listed->Add a local printer or network printer with manual settings->Next

reate a new Port->Multi File Port Monitor->Next

Type a name for the port it can be anything->OK

For Output path - browse to the Hot Folder created

Filename pattern-%t

Select OK button

For printer select Have Disk

Browse to the folder you installed Ghostscript in

Default path C:\Program Files\gs\gs9.15\lib\ghostpdf.inf

Select Open->OK

For printer name, change it to your printer model name -> Next

Share this printer so that others on your network can use it->Next

Un-check use as default->Finish

Big Systems does not offer any support for these applications. Information provided here is to assist you in the installation of the software. If you have issues with the use of these applications you need to contact the respective software designers. If you have printing issues with a file, determine if it is Ghostscript or the RIP by saving the file to a memory stick and then open it in the RIP and see if the issue repeats. If the issue still exists the problem is the with the RIP manufacturer.



Networking for Wide Format Printers

Notes

Hot Folder Print

This is a folder on the PC that was created by the RIP software. This folder is monitored by the RIP. When a job appears in the folder the RIP knows what to do. These folder will only process jobs if they are in the correct file type. These types include .eps .pdf .ps .jpg .png .tif .psd.

They will not work native files like .doc .ai .html .qrk .ind etc. Native file types need to be printed. The printing process convert them to the correct language required.

Wastach

Does not create a Virtual Printer. Therefore, you can only Hot Folder Print. There is a utility that might work and it can be found at <http://sourceforge.net/projects/mfilemon/>. We offer this as a possible solution. We do not support the product. Read the manual for more information. We know that this does not work on a Windows 8 PC.