

FIERY CONTROLLERS AND FIERY PRINT DRIVERS



WHAT DO YOU NEED TO KNOW ABOUT WHY YOU NEED A FIERY DRIVER

The ins and outs, ups and downs of trying to get the Fiery print driver installed and working properly and why it seems to take so much today.



FIERY CONTROLLERS AND FIERY PRINT DRIVERS

You want to get the most out of your Fiery controller and ensure your prints come out exactly as you expect. That's a reasonable goal. But to achieve it, you first need a solid understanding of what a print driver is and why the Fiery requires its own specialized driver.

WHAT IS A FIERY CONTROLLER?

A Fiery Print Controller (often called a Fiery server or Fiery DFE) is a specialized "digital front end" computer and software that sits between your design/workstation and a digital printer, converting print files into optimized print-ready data and managing color, speed, and workflow for production printing environments.

A Fiery Print Controller is a hardware-software system dedicated to driving a specific digital press or printer, usually in commercial or high-volume environments.

It receives files (typically PDF or PostScript), processes/renders them, applies color and print settings, and sends optimized data to the print engine so it can print accurately and efficiently.

In printing, a digital front end (DFE) is the workflow touchpoint that accepts a print file and converts it into a format the printer can actually use to lay down ink or toner on paper.

Fiery controllers are DFEs tuned to specific printers and presses from many manufacturers, providing fast RIP (rendering) performance and native PDF workflows tailored to those devices.

Fiery Print Controllers are commonly used on production digital presses and high-volume office or print shop devices from brands such as Canon, Ricoh, Konica Minolta, and others.

They offer the ability to have precise color control, fast turnaround on complex jobs, and centralized management of multiple printers and workflows.

One thing to keep in mind.

A print driver allows you to send a file to a specific printer, but not all drivers are created equal. The two primary print languages—PCL and PostScript (PS)—can seem similar in purpose, yet they operate quite differently. Choosing the right one is essential if you want to get the best performance and output from your printing device.

Fiery Controllers are not new, in fact, they date quite a ways back and back in the days that they started, a protocol had to be used to get the information from the computer to the Fiery Controller.

This protocol was LPR/LPD. Simplistically, the LPR/LPD protocol is a TCP/IP network printing protocol that lets a client send print jobs to a remote print server or printer queue. To go a bit deeper, The full name is Line Printer Daemon protocol / Line Printer Remote protocol, commonly referred to together as LPR/LPD. In this model, the LPR component is the print client that submits jobs, and the LPD component is the print server (daemon) that receives and queues those jobs.

One of the issues we have today is, the LPR/LPD protocol is considered the old way of doing things. Today, printers use Port 9100 to be the transfer pipeline of information from print queue on a computer to the printer.

Port 9100 is a TCP port used for "raw" or "AppSocket/JetDirect" network printing, where a client streams printer-ready data directly to a printer over a simple TCP connection. Most print drivers when installed today, install the Port 9100 as the default connection for the print driver.

Fiery Controllers do not like Port 9100 and "raw".

Something of Interest.

Unlike LPR/LPD, which uses a formal print server/queue protocol on port 515, raw printing over 9100 is essentially a socket-level data stream without control files or queue semantics.

The printer listens directly on port 9100, and there is no requirement for an LPD daemon or LPR request structure,

One problem that will take place, if the LPR/LPD protocol is not installed and running, is the Fiery driver will not install correctly and not work as anticipated. That may be a bit harsh, the LPR/LPD protocol has never truly left the Windows environment but it stopped being "turned on" around the start of the Windows Vista OS.

Today, you must go into the Windows Features and enable the LPR/LPD protocol or it cannot be used.

(Microsoft notes that LPR/LPD is deprecated and that printing using this protocol may fail after installing July 9, 2024 and later updates, with guidance to migrate UNIX clients to IPP instead.)

IPP, the Internet Printing Protocol, a network protocol for submitting and managing print jobs over HTTP/HTTPS between clients and printers or print servers.

IPP vs legacy protocols (LPR/LPD, port 9100)

IPP largely supersedes older printing protocols like LPR/LPD and raw 9100/AppSocket printing, which provide limited job control and little to no built-in security.

Modern print stacks increasingly default to IPP, especially for wireless, cloud, and cross-platform printing, while treating LPR/LPD and 9100 as legacy or compatibility options. (from online definition source)

For our practical daily work, the Fiery Controllers work best when using LPR/LPD and while it is available, that is the best route to go.

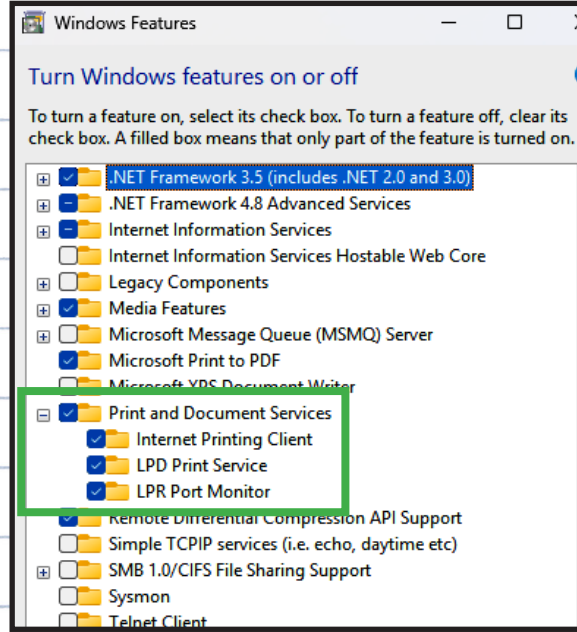
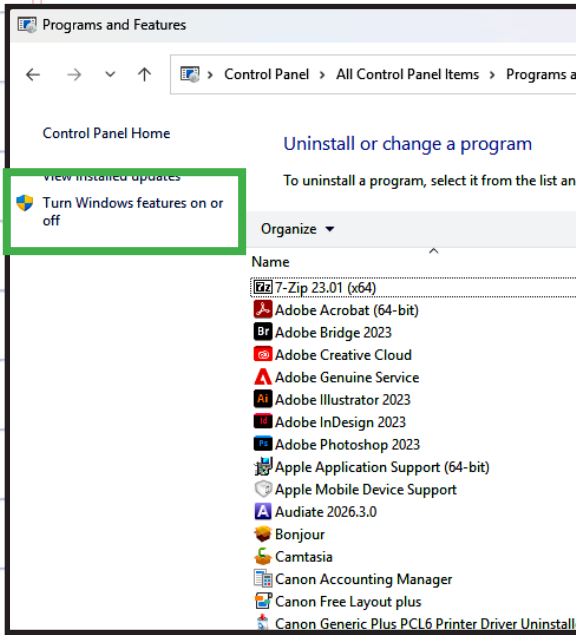
This provides the background on LPR/LPD, and the reason it remains necessary is that Fiery controllers still rely on it.

Now let's get into what and how the print driver should be installed.

First, let's make sure the LPR/LPD protocol is running on the Windows OS.

To find where this can be enabled, find where the Windows Programs and Features are on the OS system you are running.

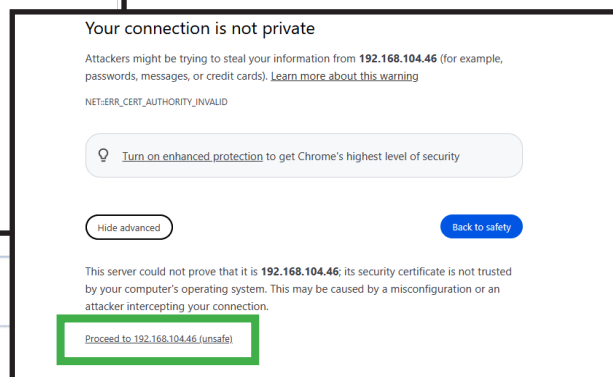
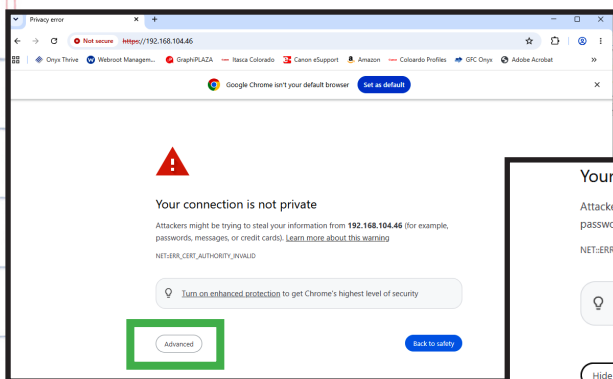
Simply use the drop down menu to find it and check it, then your system should be ready. In some cases you may need to restart the Windows OS.



With the LPR protocol running, let's get the print driver for the Fiery Controller. The easiest place to find the correct print driver is to go to the Fiery Controllers web page.

When you first reach the web page, you may be greeted with a warning that your connection is not private. Clicking on the

"Advanced" button will open a new page with a "Proceed to IP Address" of your Fiery Controller.

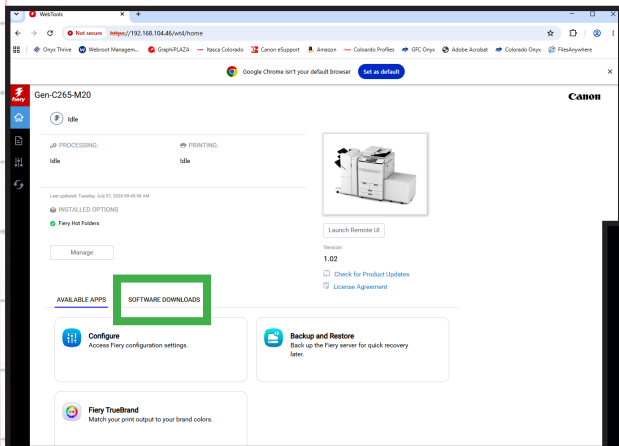


Click on that and you will be taken to the web page for the Fiery.

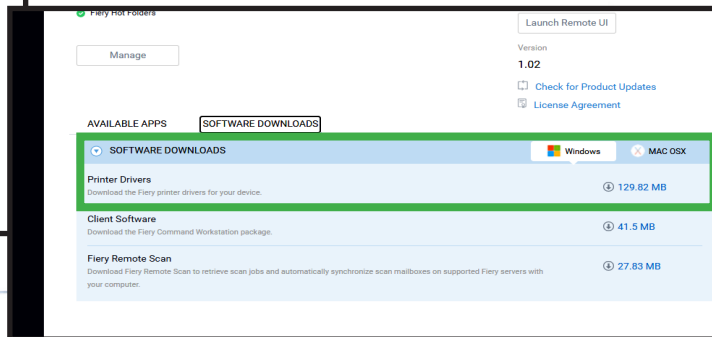
Why does this happen?

This happens because the Fiery's HTTPS certificate isn't trusted by your browser—typically it's self-signed, expired, or issued to a name that doesn't match how you're reaching the controller (IP vs hostname).

When you browse to Command WorkStation / Fiery WebTools over HTTPS, the Fiery server presents a TLS certificate. Your browser checks if that certificate is signed by a trusted Certificate Authority, not expired, and matches the URL you typed. If any of those checks fail (common on embedded devices that use self-signed certs or bare IPs), Chrome/Edge/Safari throw a "connection is not private" / ERR_CERT_AUTHORITY_INVALID warning.

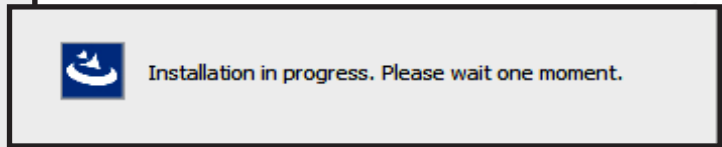
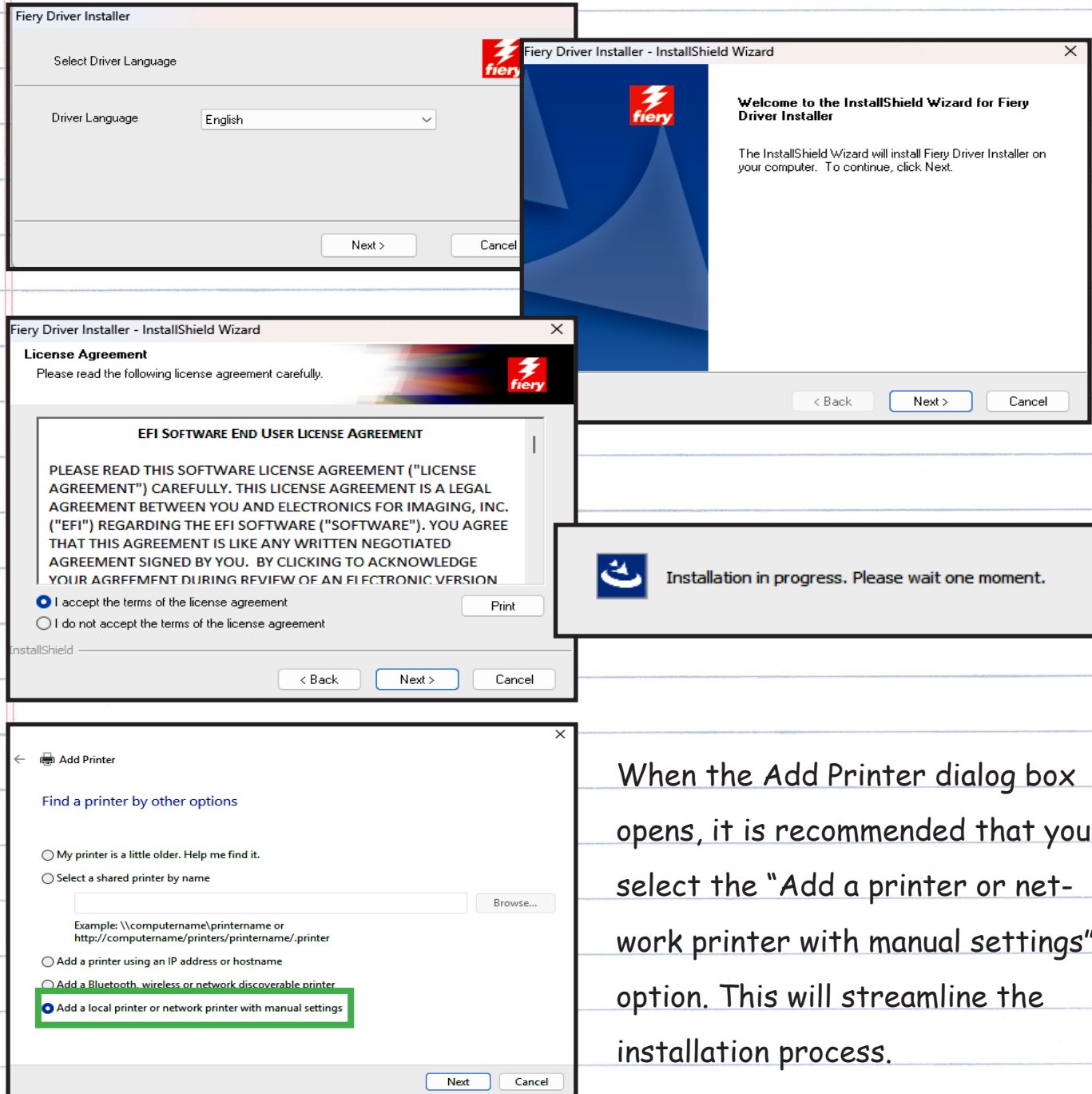


When you are finally on the Fiery Controller's web page, you can navigate to the "Software Downloads" tab.



It will detect what operating system you are using and you can then download the Print Driver from there. Typically this will go to the Downloads folder of your OS.

When you double click on the downloaded print driver, it will start the installation wizard.



When the Add Printer dialog box opens, it is recommended that you select the "Add a printer or network printer with manual settings" option. This will streamline the installation process.

INSTALLING A PRINT DRIVER USUALLY REQUIRES ADMIN RIGHTS ON THE LOCAL COMPUTER OR THE SERVER.



← Add Printer

Choose a printer port

A printer port is a type of connection that allows your computer to exchange information with a printer.

Use an existing port: LPT1: (Printer Port)

Create a new port:

Type of port: **Standard TCP/IP Port**

Use Standard TCP/IP.

← Add Printer

Type a printer hostname or IP address

Device type: TCP/IP Device

Hostname or IP address: 192.168.104.46

Port name: 192.168.104.46_3

Query the printer and automatically select the driver to use

The IP Address of the printer goes here.

Next Cancel

← Add Printer

Install the printer driver

Choose your printer from the list. Click Windows Update to see more models.
To install the driver from an installation CD, click Have Disk.

Printers

- Canon iPR Svr M20 PS V1.0
- Canon iPR Svr M20 PS V1.0 US**

This driver is digitally signed. [Tell me why driver signing is important](#)

Windows Update

If there is a "US" in the name, use that version.

Next

← Add Printer

Which version of the driver do you want to use?

Windows detected that a driver is already installed for this printer.

Use the driver that is currently installed (recommended)

Replace the current driver

Next Cancel

← Add Printer

Type a printer name

Printer name: Canon V700 M20

This printer will be installed with the Canon iPR Svr M20 PS V1.0 US driver.

Name your Printer.

Next Cancel

← Add Printer

Printer Sharing

If you want to share this printer, you must provide a share name. You can use the suggested name or type a new one. The share name will be visible to other network users.

Do not share this printer

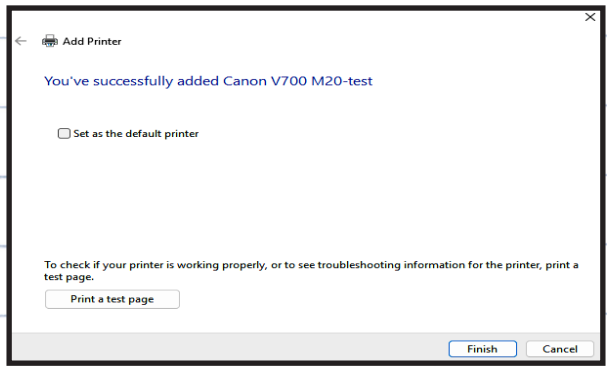
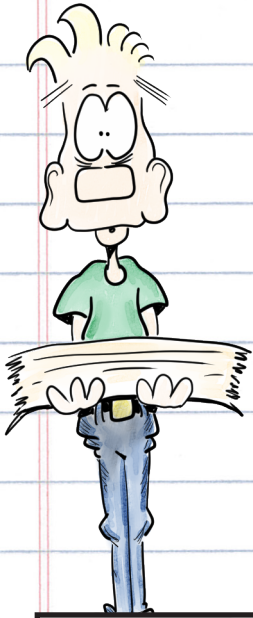
Share this printer so that others on your network can find and use it

Share name: _____

Location: _____

Comment: _____

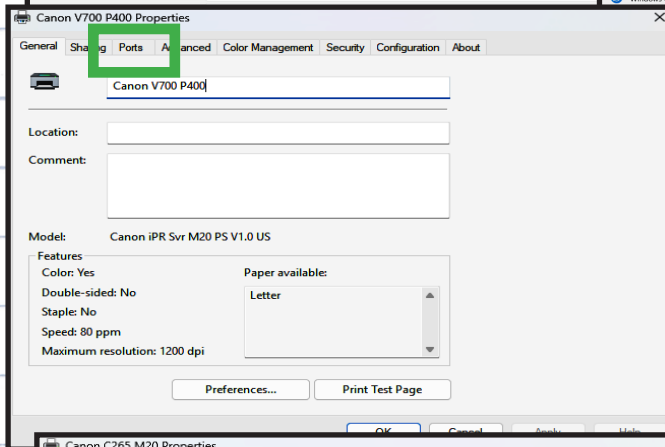
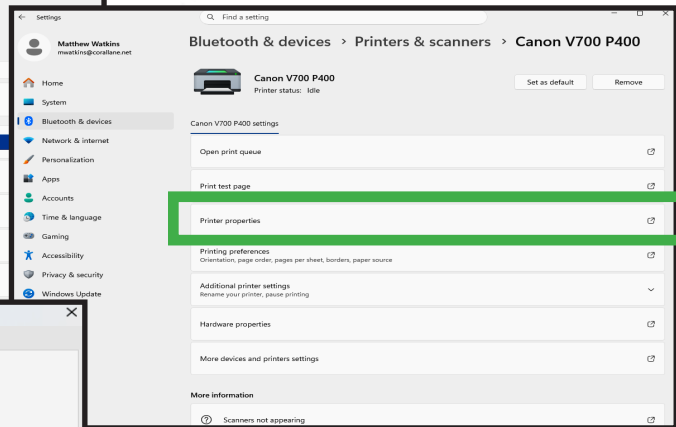
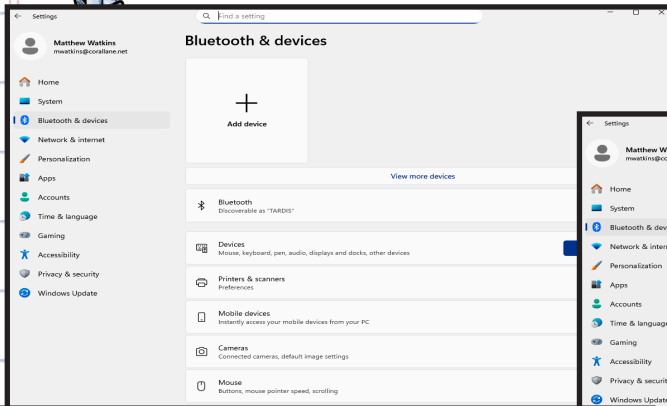
If you are installing on a Print Server, you'll want to Share the driver here. It can be done later as well.



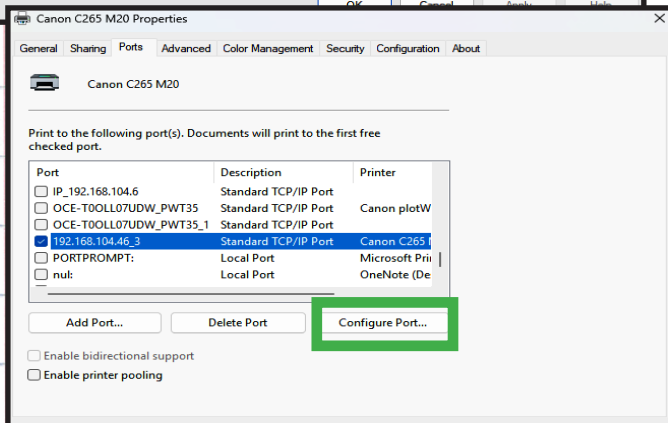
Click Finish.

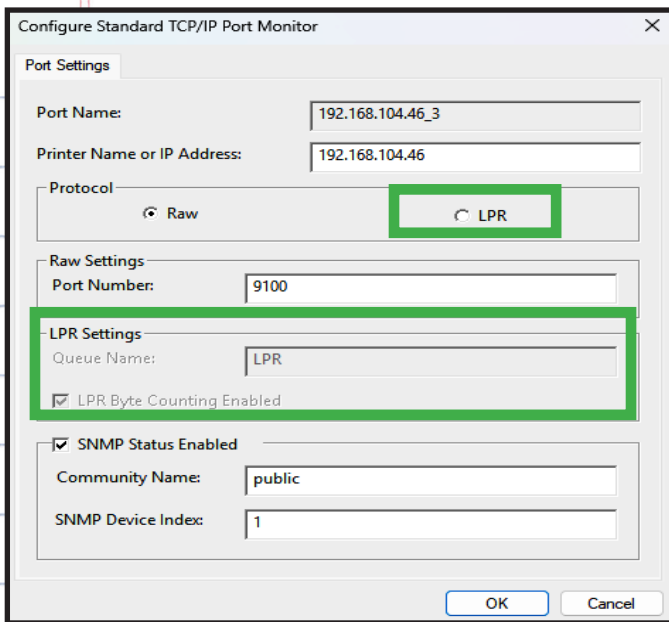
The driver is now installed and it's time to make sure it is properly configured for use.

You need to go to the "master" driver in Devices and Scanners and go to the properties of the new driver.



The first thing we want to do is configure the port. This is where we will put in the settings for LPR. Click on the Ports tab. Now highlight the IP Address of the printer and click on Configure.

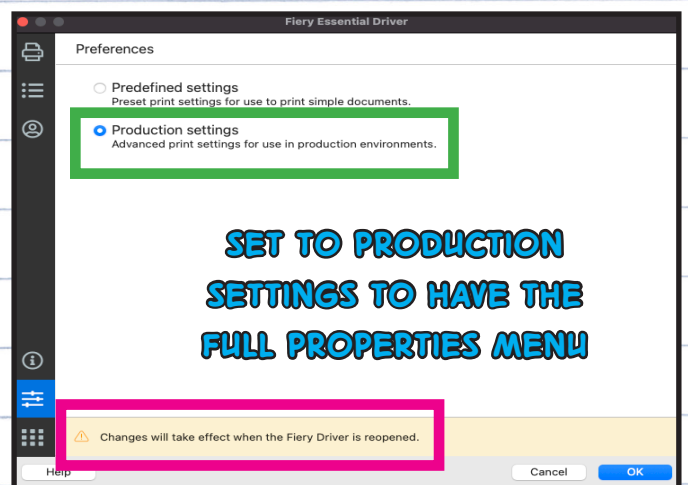
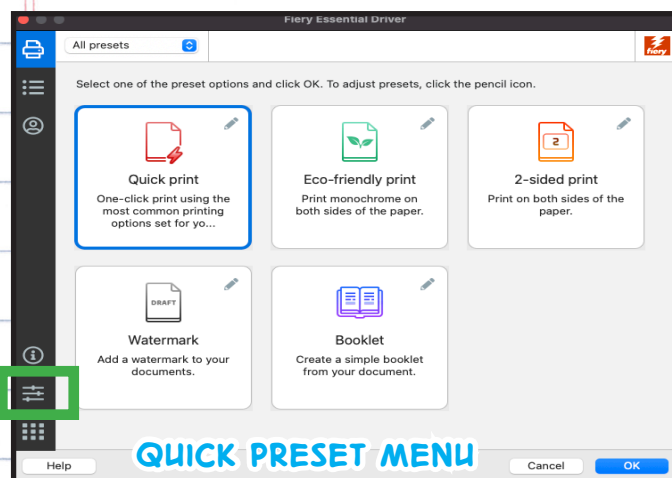
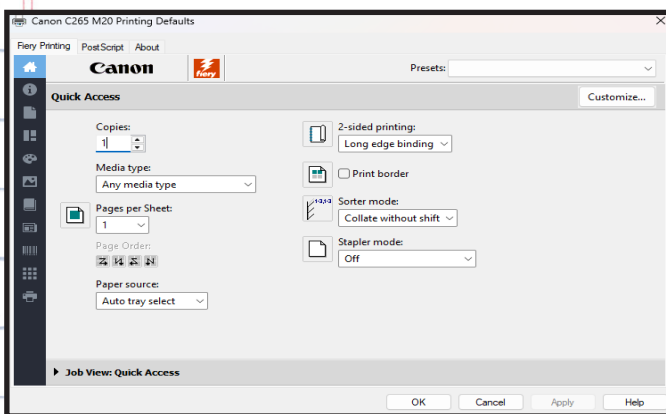




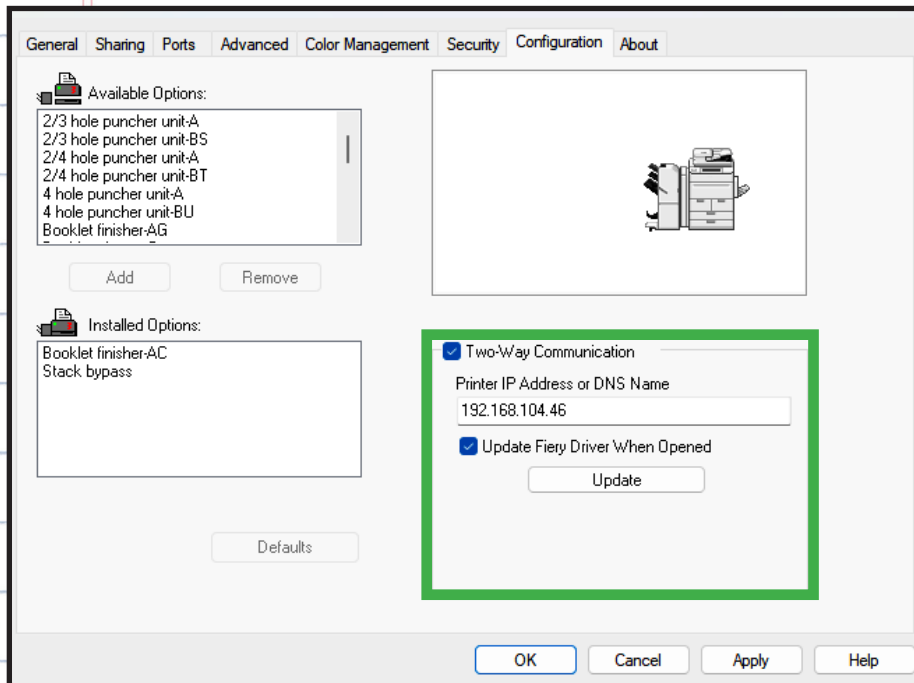
Often the driver will default to the RAW protocol so the LPR needs to be checked. In the LPR Settings box type: "print". Finally un-check both LPR Byte Counting Enabled and SNMP Status Enabled. Without enabling LPR and setting the queue name to "print" the driver will not function correctly.

If LPR is not enabled and the driver has been shared from a Print Server, users will experience ongoing issues. One will be the driver will be available and then not available (grayed out). Loss of device functionality can also happen. Check the Preferences of the print

driver and this should be what opens. If a "Quick Preset Menu" opens, click on the slider icon in the lower left hand corner and set the driver for Production mode.



CONFIGURING THE PRINTER OPTIONS/ACCESSORIES



When installing the driver or after a new accessory has been added to the printer, the configuration of those accessories needs to be done. This must take place at the "master" driver location. And, it will require Admin rights to make changes.

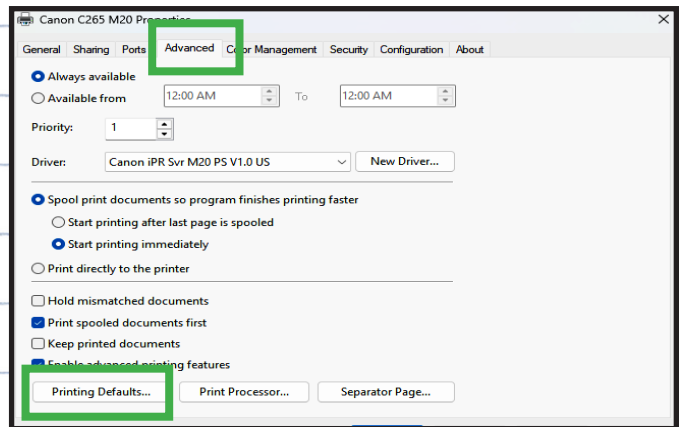
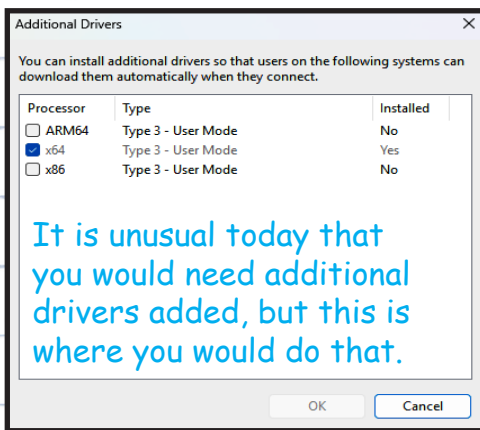
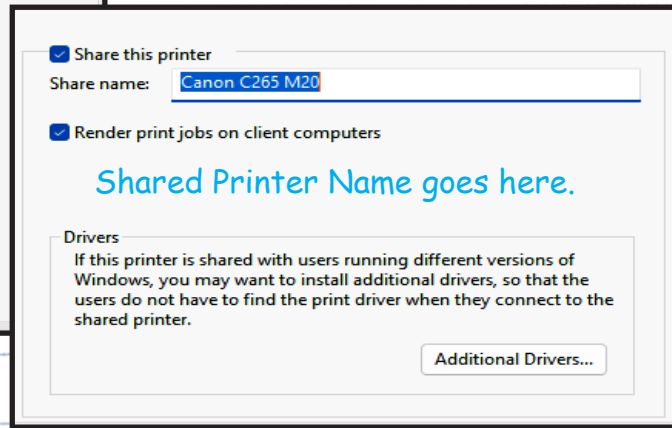
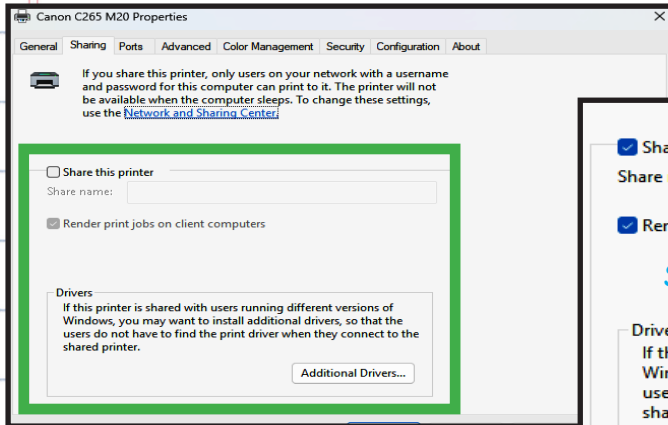
If a user is not seeing some of the accessories, this is the place to check for those accessories. Checking the Two Way Communication and Update Fiery Driver will help with this. Make sure those two items are checked and then click on the Update button. Both the accessories in the Installed Options box and the Picture should change to reflect the correct configuration.

IF THIS DOES NOT MAKE THE CORRECT CHANGES...un-check the two boxes, add the options manually and click the APPLY button. It is rare that the options will not auto configure and that may be due to security polices on the network but it can happen.

Once the configuration is correct, the end user, if on a network share, may need to reboot their PC. Or minimally, log out and log back in for the changes to take effect.

SHARING THE PRINTER FROM A PRINT SERVER

Fiery print drivers truly enjoy living by themselves and not being shared. It is recommended that they be installed on the local user's PC or Mac but in the event that it is necessary to install a Fiery Print Driver on a Print Server, please make sure the LPR settings are correct and note, the Custom Settings Page will not be pushed to through the share.



To make changes to any default settings for the shared user, these settings must be made from here. Not all settings will be shared and would need to be set on the local user's PC.

WHY IS IT GETTING HARDER TO INSTALL A FIERY DRIVER ON A WINDOWS SERVER OS?

It's getting harder mainly because Microsoft is locking down printing for security and standardization, while phasing out a lot of legacy driver support, especially on newer Windows 10/11 builds.

Big picture: what changed

Microsoft is deprecating the old V3/V4 printer driver models that many legacy devices still rely on, and has started cutting them off from Windows Update in 2026.

Windows 10/11 increasingly push you toward "class" drivers (IPP, generic PCL/PS) and Protected Print mode, which limits or outright blocks third-party vendor drivers unless you change defaults.

A clean Windows install that used to auto-discover and install a printer often no longer finds suitable drivers, forcing manual downloads and workarounds.

Security tightening

Printer drivers have been a recurring attack vector (e.g., PrintNightmare), so Microsoft is reducing how many third-party drivers can plug directly into the system and spooler.

Protected Print and related policies can silently block or restrict non-Microsoft drivers from installing or loading, particularly in updated Windows 11 and managed environments.

On some systems (S mode or strict app recommendations), installers from vendor sites are treated like untrusted apps, and you must switch settings to "Anywhere" or exit S mode before they'll run.

What is S Mode?

S mode is a locked-down variant of Windows 10/11 that only lets you install apps from the Microsoft Store and forces Microsoft Edge as the browser, in exchange for tighter security and slightly better performance.



By day, Matthew Watkins is a Color Analyst in the Digital Printing World and at night or on the weekends you can find him behind his drawing table or behind one of several types of cameras and then possibly in front of his computer either editing files like this one or video and maybe even a photo or two.

He holds several industry certificates including but not limited to, Idealliance G7 Expert, EFI Fiery Expert, Adobe certifications, some Microsoft certifications and other things that say he might actually know something about something.

For the most part he is a self proclaimed color nerd/geek and loves nothing more than to learn all he can about the wonderful fun filled universe that is all things color.

He is also a certified trainer and enjoys giving as much of his knowledge away as others will let him. "Sharing is the best part of knowing something."

He is married to the best wife in the whole wide world and has four of the best kids you could come across. He resides in the state of confusion and Illinois, which some might say are one in the same. On a hot summer day you might find him lounging in the back yard pool or in front of the TV if the Cubs are playing. If, of course, he has the day off!

Should you like to reach him, he can be found at his LinkedIn page:
www.linkedin.com/in/matthew-watkins-203

Most of the drawings in this booklet were created by Matthew Watkins. Some images may be screen shots of applications and some may be from other sources. The whole of this booklet is copyrighted by and through the US Copyright Law. Which means, the Copyright symbol below is showing that this booklet and all it contains may well be copyrighted. However that doesn't mean that everything in this booklet is true and correct but we did try to make sure it was.

ALSO CHECKOUT HIS DAILY COMIC STRIP AT WWW.CHESTERPOMALLY.COM