

MFP	Technical Tip
TT-052421_1	

Models: All MX Models

Priority Medium

Date: May 2021

Subject: Universal Print from Microsoft

In March of this year, Microsoft announced a new cloud printing service called “Universal Print”.

What is Universal Print from Microsoft?

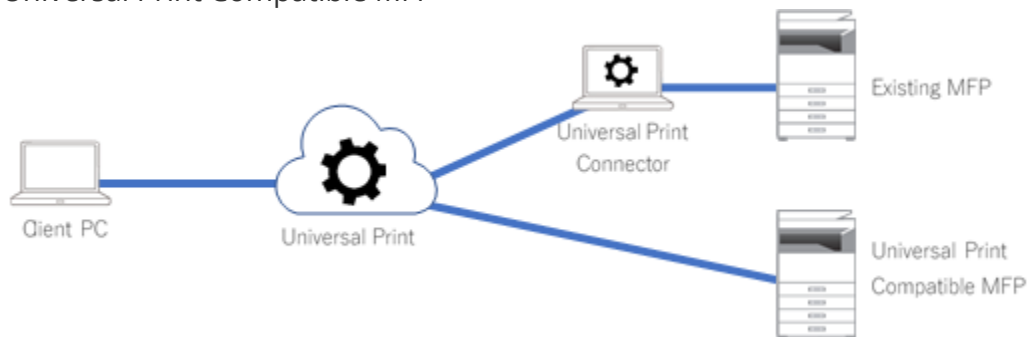
Universal Print is a modern print solution that organizations can use to manage their print infrastructure through cloud services from Microsoft.

Sharp will launch a new Universal Print compatible product in late 2021. In addition, Universal Print can be deployed with existing Sharp MFPs by using the Universal Print connector software from Microsoft.

For detailed license conditions of Universal Print Service, refer to: https://aka.ms/UP_TryNow

There are two ways of printing through Universal Print:

- 1) Via Universal Print connector
- 2) Using Universal Print Compatible MFP



Print via Universal Print connector

Setup

1. Based on the table below, install the Printer Driver for the target MFP onto the PC where the Universal Print connector is installed, and make sure that the driver is ready to print.
2. Download and install the Universal Print connector.
3. Register the Printer Driver installed at step 1 with the Universal Print portal. Launch the Universal Print connector, select the Printer Driver from the "Available Printers" list, and click the "Register" button.
4. Grant user permissions to the registered driver.
 1. Access the Microsoft Azure portal website.
 2. Select Universal Print > Manage Printers.
 3. Select the Printer Driver and then click Share Printer.
 4. Select the user you want to allow access to and then click Share Printer.

For detailed procedures, refer to: <https://docs.microsoft.com/universal-print/fundamentals/universal-print-getting-started>

Supported Models and Printer Drivers

Category	Supported Models	Printer Driver
A3 Color	BP-30C25	<u>“SHARP PCL6 V4 Printer Driver for Universal Print”</u>
	MX-2630N, MX-3070N, MX-3570N, MX-4070N, MX-3060N, MX-3560N, MX-3050N, MX-3550N, MX-4050N, MX-4060N, MX-5070N, MX-6070N, MX-5050N, MX-6050N, MX-3070V, MX-3570V, MX-4070V, MX-3060V, MX-3560V, MX-4060V, MX-3050V, MX-3550V, MX-4050V, MX-5050V, MX-5070V, MX-6050V, MX-6070V	
	MX-3061, MX-3071, MX-3561, MX-3571, MX-4061, MX-4071, MX-2651, MX-3051, MX-3551, MX-4051, MX-5071, MX-6071, MX-5051, MX-6051	
	MX-6580N, MX-7580N	
	MX-7081, MX-8081	
	MX-7090N, MX-8090N,	
A3 Monochrome	MX-M2630, MX-M3070, MX-M3050, MX-M3570, MX-M3550, MX-M4070, MX-M4050, MX-M5070, MX-M5050, MX-M6070, MX-M6050	
	MX-M2651, MX-M3071, MX-M3051, MX-M3571, MX-M3551, MX-M4071, MX-M4051, MX-M5071, MX-M5051, MX-M6071, MX-M6051	
	MX-M6570, MX-M7570	

	MX-M905	
A4	MX-C304W, MX-C303W	
	MX-B355W, MX-B455W	
	MX-B356W, MX-B376W, MX-B456W, MX-B476W	
	MX-C357F, MX-C407F, MX-C507F, MX-C557F, MX-C607F	Please use PCL6(XL) printer driver of each model
	MX-C407P, MX-C507P, MX-C607P	
	MX-B427W, MX-B467F	
	MX-B557F, MX-B707F	
	MX-B427PW, MX-B467P	
	MX-B557P, MX-B707P	

Supported Print Functions List

The print functions that can be used are as follows:

Color Mode	Available
Copies/Collate	Available
Orientation	Available
2-Sided Printing	Available
Paper Size	Available
Paper Type	Available
N-up	Available
N-up Order	No
Paper Tray	Available
Output	No
Staple	Available
Position	Available
Punch	No
Resolution	Available

Appendix1 [Universal Print] Print settings supported by the printer driver

Driver Name: SHARP PCL6 V4 Printer Driver for Universal Print - Version: 01.01.09.07

Items	Values	Supported
Color	Auto / Color / Grayscale	✓
Paper type	Auto / Plain / Letter head / Label / OHP	✓
	Color paper / Heavy paper / Envelope / Photo paper	
Paper size	A3 / A4 / A5 / B4 / B5	✓
	Letter / Legal / Executive / Invoice	✓
	JapanHagakiPostcard	✓
	A0 / A1 / A2 / A3 wide / A4 Wide / A6 / Long Paper	
	13x19 / 12x18 / 8.5x13.4 / Foolscap / 8K / 16K / 216x343 / 320x450 (SRA3) / 225 x 320 (SRA4)	
	DL / C4 / C5 / C6 / COM9 / COM10 / Monarch	
	Japanese envelope Kaku2 / Kaku3 / Chou3 / Chou4 / Chou40 / You2 / You4	
	JapanHagakiDoublePostcard	
	Custom Paper / User 1 / 2 / 3 / 4 / 5 / 6 / 7	
Paper tray	Auto / Tray 1 / Tray 2 / Tray 3 / Tray 4	✓
	Tray 5 / Tray 6 / Tray 7 / Tray 8 / LCT / Bypass tray	
Output tray		
Finishing	Staple	1 Staple (Left or Top)
		1 Staple (Right)
		2 Staple (Left)
		2 Staple (Right)
		2 Staple (Top)
		Saddle Stitch
	Punch	
	Position	Left / Right / Top
Fit to page		Depends on the app
Number of copies		✓
Collate		✓
Printing range		Depends on the app
Orientation	Portrait / Landscape	✓
N-up	1-up / 2-up / 4-up / 6-up / 8-up / 9-up / 16-up	✓
	Order	
Duplex	Long edge / Short edge	✓
Quality	Draft / Normal / High	
Resolution	600dpi / 1200dpi	

Appendix2: Limitations regarding SHARP v4 Printer Driver for Universal Print

Driver Name: SHARP PCL6 V4 Printer Driver for Microsoft Universal Print - Version: 01.01.09.07

Limitation #1

Phenomenon: Specifying staple position ([Left edge], [Right edge], [Top edge]) in [Document binding] does not work.

Cause: The selection in [Document binding] will not be reflected since specification of staple position is included in [Stapling].

How to mitigate: If you specify staple position, use selection in [Stapling].

Limitation #2

Phenomenon: [Back to Front] in [Page Order] does not work.

Cause: Factory guesses this is because of the behavior of OS module.

Limitation #3

Phenomenon: There is no exclusive restriction on UI between features.

Cause: Due to the specifications of Universal Print, there is no exclusive restriction between features. A feature that is exclusive with other ones can be specified, however, all the specified features cannot be processed in the job.

Limitation #4

Phenomenon: Devices with the same model and the same port name cannot be registered on Universal Print Connector.

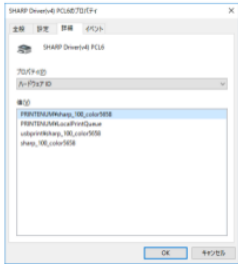
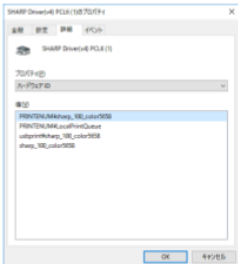
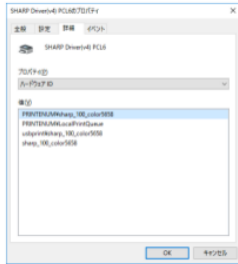
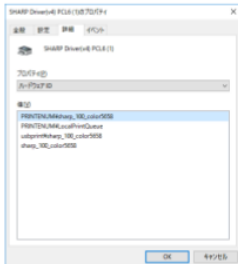
Cause: Devices with the same model and the same port name cannot be registered due to the specifications of Universal Print.

For the detail, see Page 8.

How to mitigate: If you register devices with the same IP address, change port names for each device according to Page 9 and after.

[Reference] Limitation #4

Devices with the same model and the same port name cannot be registered on Universal Print Connector.

	pattern (1)		pattern (2)	
	Two v4 drivers Same driver name (same hardware ID) Different printer name Same IP address / Port name		Two v4 drivers Same driver name (same hardware ID) Different printer name Same IP address / Different Port name	
	SHARP		SHARP	
	SHARP Driver(v4) PCL6	SHARP Driver(v4) PCL6 (1)	SHARP Driver(v4) PCL6	SHARP Driver(v4) PCL6 (1)
Hardware ID				
	PRINTENUM\sharp_100_color5658	PRINTENUM\sharp_100_color5658	PRINTENUM\sharp_100_color5658	PRINTENUM\sharp_100_color5658
	PRINTENUM\LocalPrintQueue	PRINTENUM\LocalPrintQueue	PRINTENUM\LocalPrintQueue	PRINTENUM\LocalPrintQueue
	usbprint\sharp_100_color5658	usbprint\sharp_100_color5658	usbprint\sharp_100_color5658	usbprint\sharp_100_color5658
Port name	sharp_100_color5658	sharp_100_color5658	sharp_100_color5658	sharp_100_color5658
IP address	10.36.102.21	10.36.102.21	10.36.102.21	10.36.102.21
Registration result to Universal Print	Only one printer driver is registered in UP.		Both printer drivers are registered in UP.	

[Reference] Limitation #4

How to mitigate:

If you register devices with the same IP address, change port names for each device according the following steps.

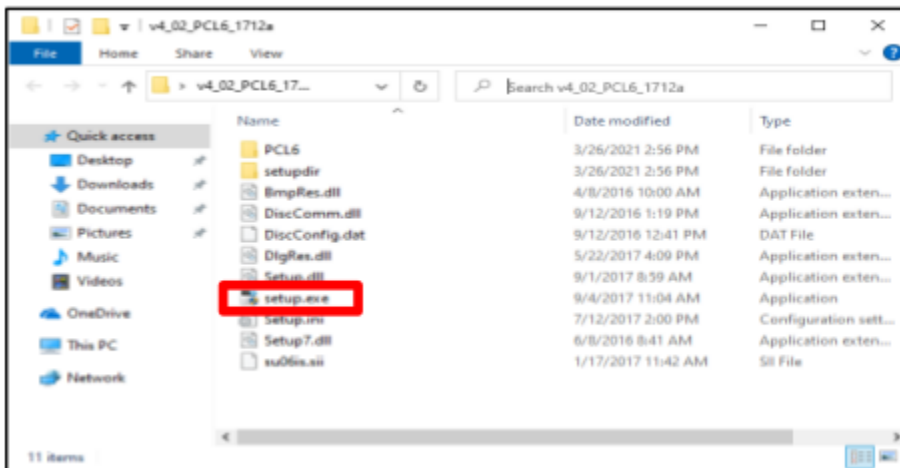
e.g.

(1) MFP-A(IP Address : 10.36.102.100) - Printer Name: MX-4071-1 (Port Name: 10.36.102.100_1)

(2) MFP-A(IP Address : 10.36.102.100) - Printer Name: MX-4071-2 (Port Name: 10.36.102.100_2)

(3) MFP-B(IP Address : 10.36.102.200) - Printer Name: MX-M4071 (Port Name: 10.36.102.200)

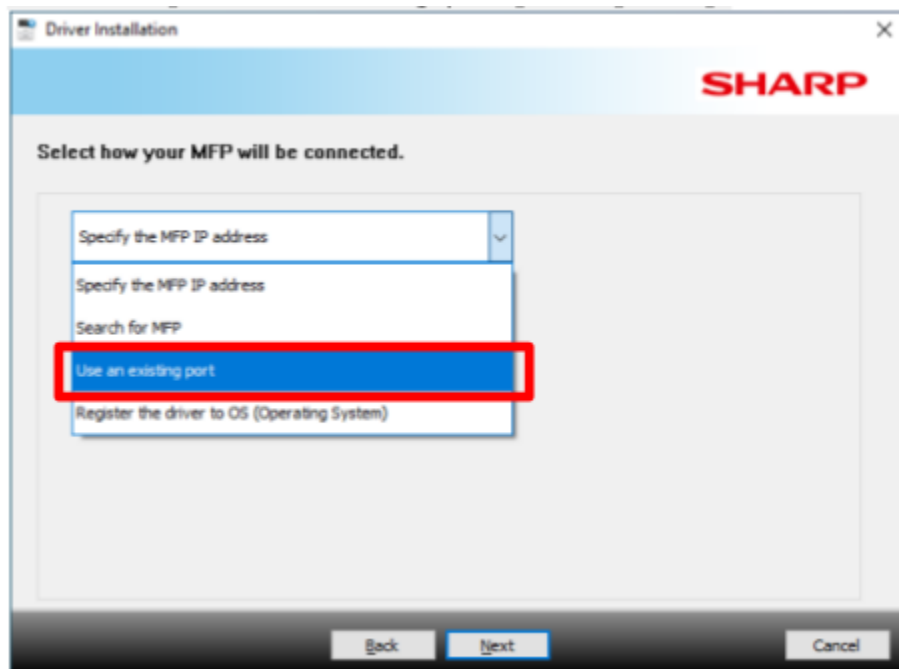
1. Execute [setup.exe] to start the installer.



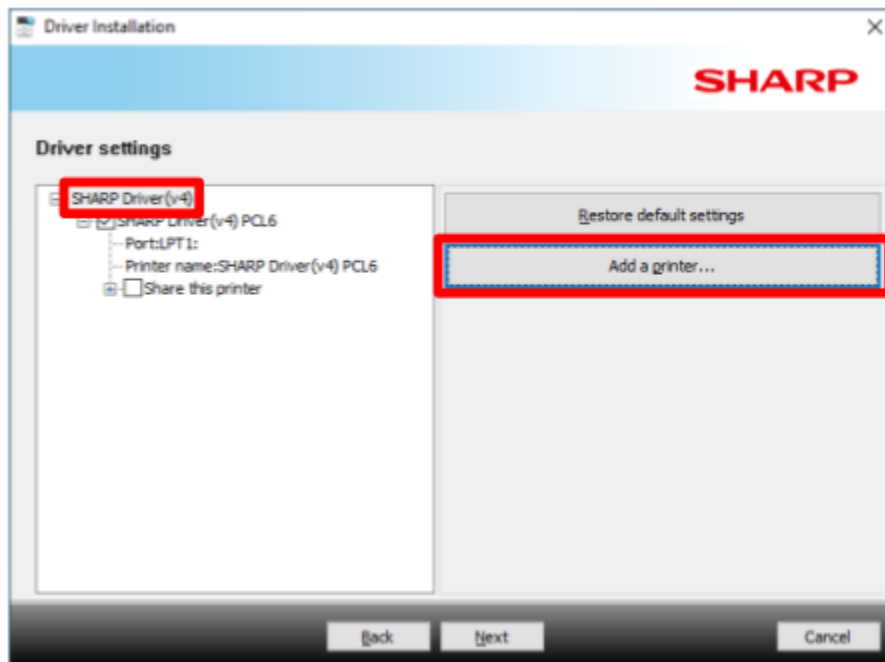
2. Select [Custom installation].



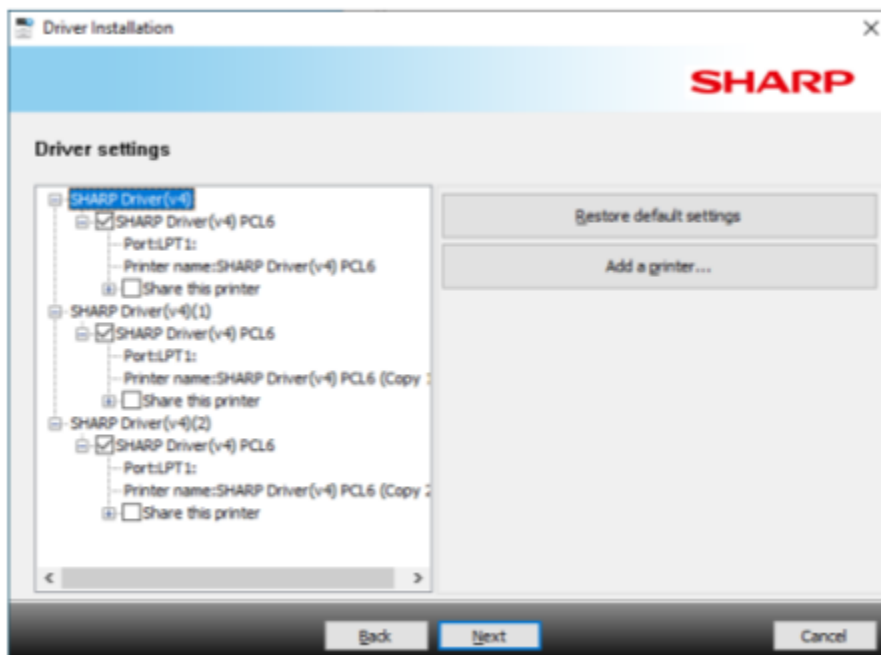
3. Select [Use an existing port] and [Next].



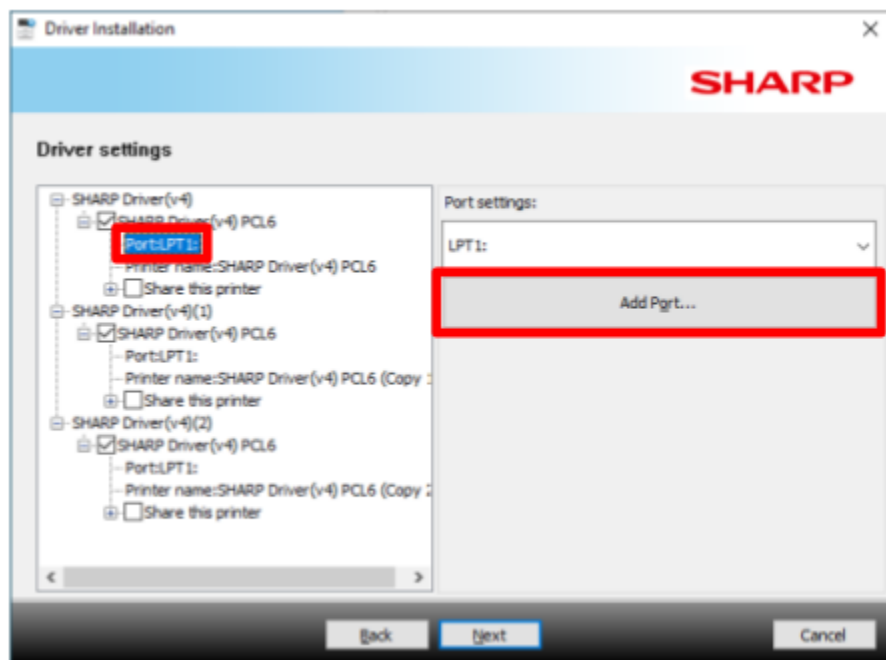
4. Select [SHARP Driver(v4)] and click [Add a printer].



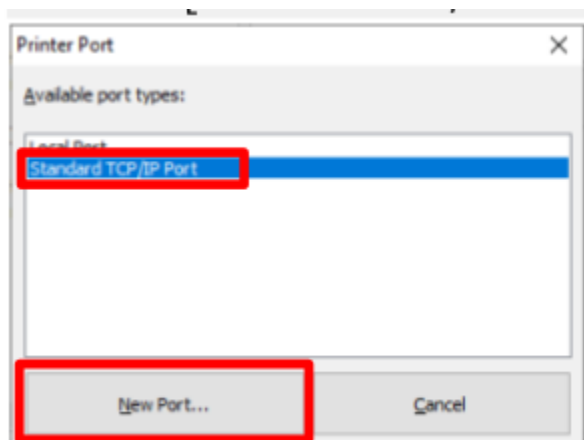
In this example, click [Add a printer] twice to create three trees.



5. Select [Port] in the first tree and click [Add Port].



6. Select [Standard TCP/IP Port] and click [New Port].



7. Enter the IP address of the MFP-A in the [Printer name or IP Address] field, and enter a name such as [IP Address + "_1"] in the [Port Name] field.

Add Standard TCP/IP Printer Port Wizard

Add port
For which device do you want to add a port?

Enter the Printer Name or IP address, and a port name for the desired device.

Printer Name or IP Address: 10.36.102.100

Port Name: 10.36.102.100_1

< Back Next > Cancel

8. Select [Port] in the second tree and click [Add Port].

Driver Installation

SHARP

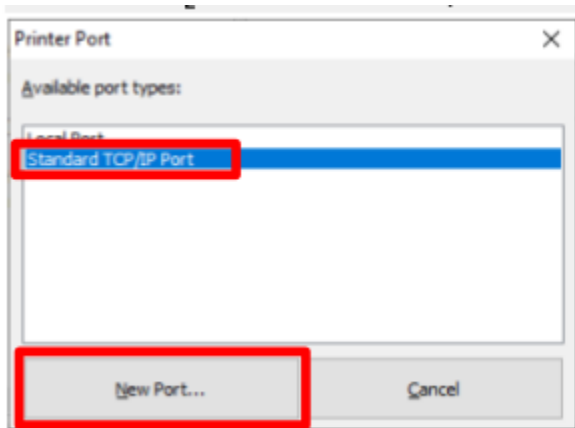
Driver settings

SHARP Driver(v4)
 SHARP Driver(v4) PCL6
 Port: 10.36.102.100_1
 Printer name: SHARP Driver(v4) PCL6
 [] Share this printer
 SHARP Driver(v4)(1)
 SHARP Driver(v4) PCL6
Port: LPT1:
 Printer name: SHARP Driver(v4) PCL6 (Copy)
 [] Share this printer
 SHARP Driver(v4)(2)
 SHARP Driver(v4) PCL6
 Port: LPT1:
 Printer name: SHARP Driver(v4) PCL6 (Copy)
 [] Share this printer

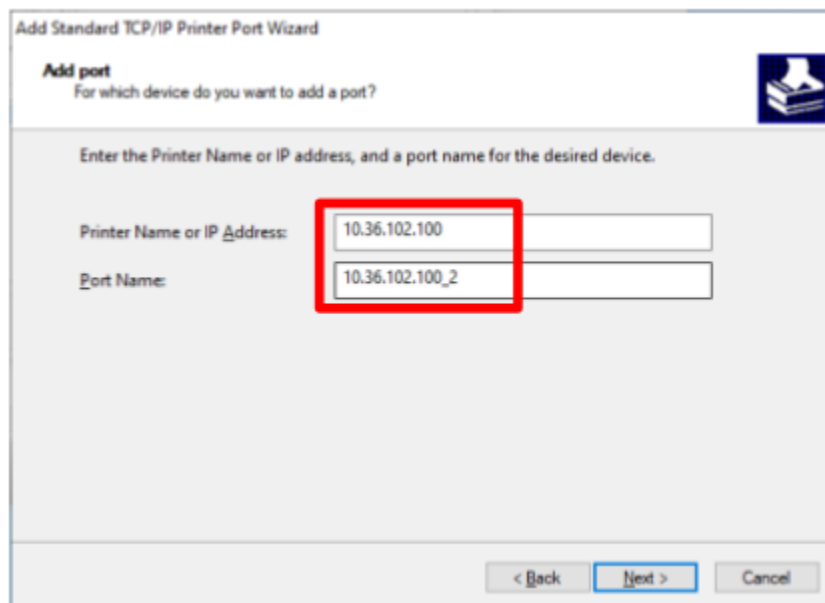
Port settings:
 LPT1:
 Add Port...

Back Next Cancel

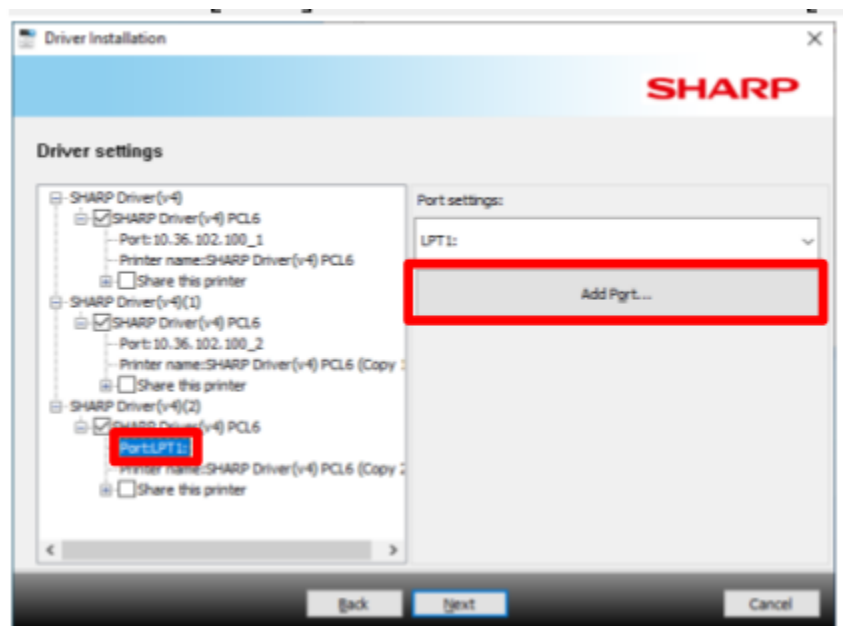
9. Select [Standard TCP/IP Port] and click [New Port].



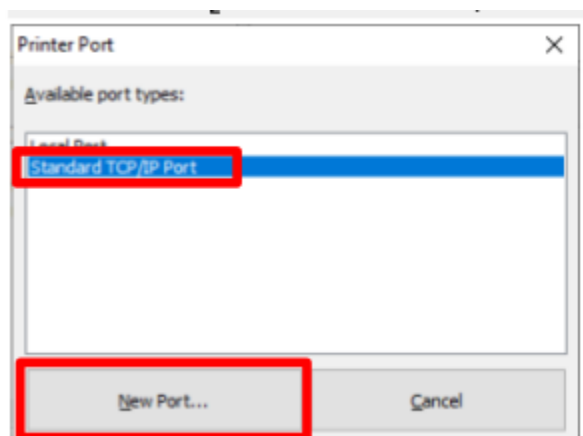
10. Enter the IP address of the MFP-A in the [Printer name or IP Address] field, and enter a name such as [IP Address + "_2"] in the [Port Name] field.



11. Select [Port] in the third tree and click [Add Port].



12. Select [Standard TCP/IP Port] and click [New Port].



13. Enter the IP address of the MFP-B in the [Printer name or IP Address] field, and enter a name in the [Port Name] field.

Add Standard TCP/IP Printer Port Wizard

Add port
For which device do you want to add a port?

Enter the Printer Name or IP address, and a port name for the desired device.

Printer Name or IP Address: 10.36.102.200

Port Name: 10.36.102.200

< Back Next > Cancel

14. Select [Printer name] of each tree and enter an arbitrary name in the [Printer Name] field.

Driver Installation

SHARP

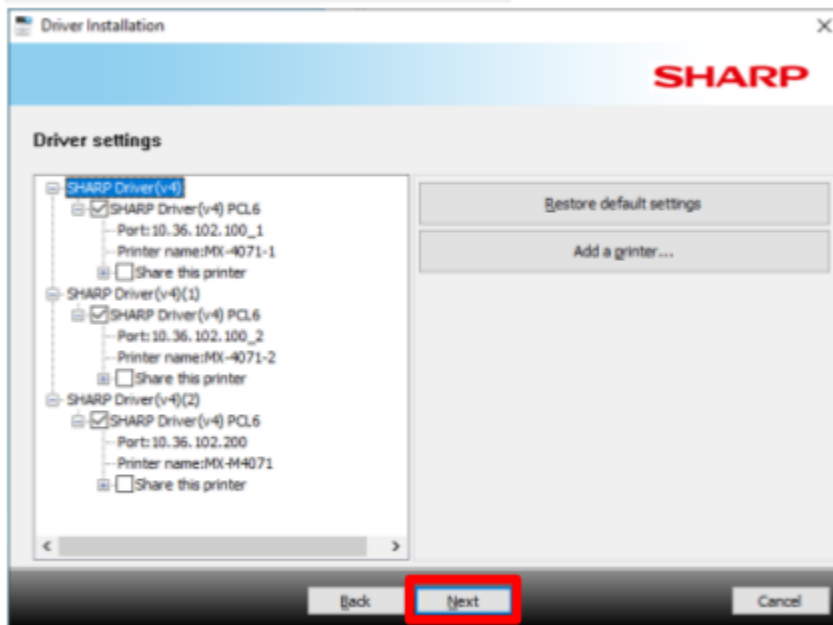
Driver settings

SHARP Driver(v4)
☒ SHARP Driver(v4) PCL6
 Port: 10.36.102.100_1
☐ Share this printer
 SHARP Driver(v4)(1)
☒ SHARP Driver(v4) PCL6
 Port: 10.36.102.100_2
 Printer name: SHARP Driver(v4) PCL6 (Copy)
☐ Share this printer
 SHARP Driver(v4)(2)
☒ SHARP Driver(v4) PCL6
 Port: 10.36.102.200
 Printer name: SHARP Driver(v4) PCL6 (Copy)
☐ Share this printer

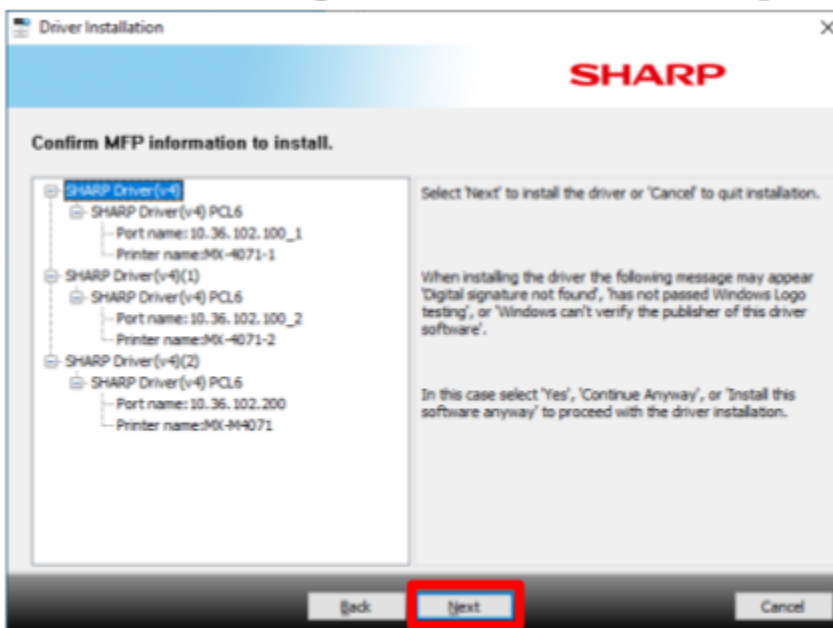
Printer names:
SHARP Driver(v4) PCL6

Back Next Cancel

15. After #14, click [Next].



16. Check the registered value and click [Next].



17. Installation is complete when the following screen is displayed.



Universal Print Compatible MFP

Universal Print compatible products are now in preparation. Sharp will support them beginning with new product introductions in Q4 2021 and will gradually expand the compatible models.

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