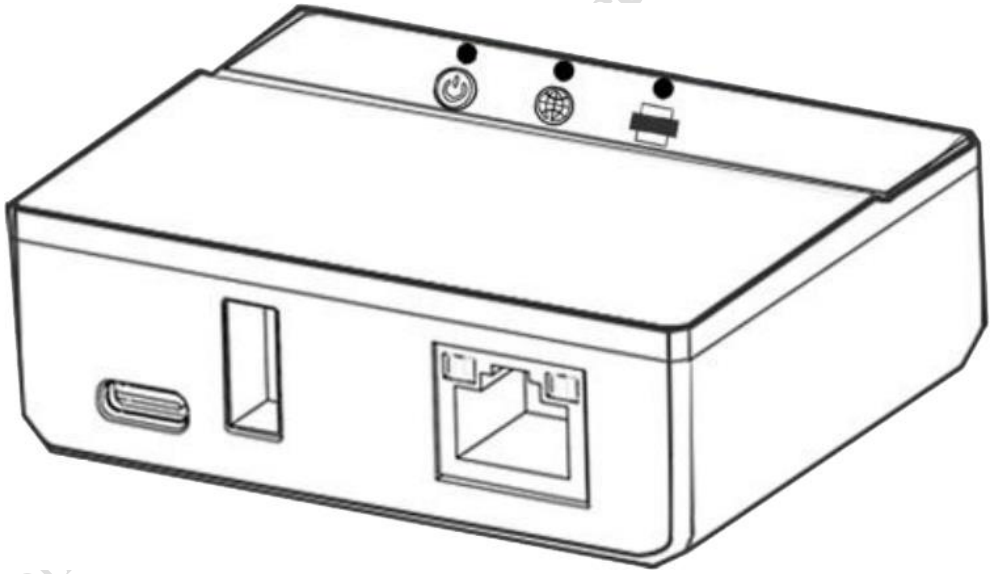
Cloud Print Server User Manual

LY-CPS-WB07

Version:1.1

Shenzhen LOYALTY-SECU Technology Co., LTD



.....1
1.Precautions 3
1.1. Purpose 3
1.2. Definition.....3
2. Product Description 4
2.1. Print Server Appearance 4
3.Cloud Print Server Quick Networking via “Print Assistant” APP.....5
3.1 “Print Assistant” APP Download & Installation 5
3.2 Choose the Cloud Print Server via the APP 5
3.3 Cloud Print Server Networking Via Wi-Fi Method 6
3.4 Introduction to Network Connection Status 7
3.5 Cloud Print Server IP Address Modification and Management.....8
4.Print Server Quick LAN & Cloud Printing via “PC Print Assistant” for Windows System. 10
4.1 Workflow to Achieve the LAN/Cloud Printing:.....10
4.2 Introduction of the PC Print Assistant 10
4.2.1. Definition.....10
4.3 Cloud Print Server “PC Print Assistant” CMS Preparation (for Windows OS only) 11
4.3.1 PC Print Assistant Download 11
4.3.2 PC Print Assistant Installation.....11
4.4 Add A Cloud Print Server in PC Print Assistant 12
4.5 Bind the USB Printer for the Cloud Print Server.....13
4.6 Exploring the LAN/Cloud Printing via PC Print Assistant 14
5.How to Configure Computer for Printing via LAN Printing (Without using PC Print Assistant)?..16
5.1 Taking Windows 11 operating system as an example 16
5.2 Taking Mac operating system as an example 21
6 How to Configure a Bluetooth Device for Printing.....23
6.1 Bluetooth Printing via Windows OS 24
7.Bluetooth Printing via Android OS 30
8 Configure WiFi Printing on an Android OS ? 33
9. FAQs 34
9.1 Check if the Print Server has successfully connected to the Ethernet network or not? ...34
9.2 To check if your USB printer supports the RAW protocol or not?.....35
9.3 To confirm if there is a print issue with a document pending?.....35
9.4 Why it is not recommended to use DHCP to obtain an IP address for the LAN print server? 36
9.5 To check if the "Enable bidirectional support" option is disabled or not.....36
9.6 Why Cloud Printer “Net” Status Shows “Offline” in the PC Print assistant 37

Shenzhen LOYALTY-SECU Technology Co., LTD

1.Precautions

Thank you for choosing LOYALTY-SECU LAN/Cloud Bluetooth USB print server. Below is the user manual providing instructions on how to use it effectively.

Please ensure that the package contains the following items:
USB print server
Power adapter
USB cable
Quick installation guide

1.1. Purpose

The USB print server serves as a LAN printing/Cloud printing/ Bluetooth printing solution for USB printers. Its primary function is to enable computers and mobile phones within the same Ethernet network to connect to the print server via wired or wireless connections for printing purposes and it also allows remote printing via cloud services. The print servers work with multiple operating systems, including Windows, Linux, Android, Harmony OS and iOS & Mac (Under development), Ideal for home, office, business, and educational environments.

1.2. Definition

Definition	Description
USB Network Print Server	A print server that supports printing with a USB printer via RJ45 Ethernet connection
USB Network WiFi Print Server	A print server that supports printing with a USB printer via an RJ45 Ethernet connection or WiFi.
USB Network Bluetooth Print Server	A print server that supports printing with a USB printer via an RJ45 Ethernet connection or Bluetooth.
Network WiFi Bluetooth Cloud Print Server	With 4 Connection Methods: Supports Wi-Fi (2.4GHz & 5GHz), Network Interface (RJ45), Cloud and Bluetooth (SPP+BLE) printing.
1 USB Port Print Server	A device that supports connecting 1 USB printer.
3 USB Ports Print Server	A device that supports connecting 3 USB printers.
“Print Assistant” APP for Android	Print server configuration APP for quick networking
PC Print Assistant	A client software that enables LAN & Cloud printing configuration for the print server, USB printer, computer.

Shenzhen LOYALTY-SECU Technology Co., LTD

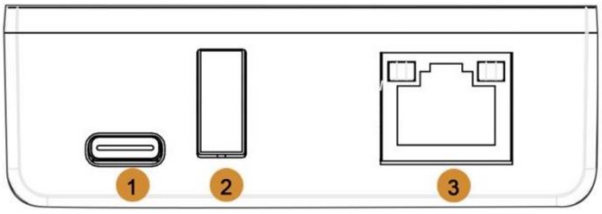
Computer	The PC Print Assistant is only compatible with Windows operating systems. Both MAC OS (Via LAN Printing only) and Windows computers can support printing jobs with the print server.
Smartphone	Print job support with the print server is available only for Android smartphones.
USB Printer	The print server is compatible only with USB printers.
Network	The print server supports printing through a local area network (LAN) & Remote printing via cloud service.

2. Product Description

2.1. Print Server Appearance

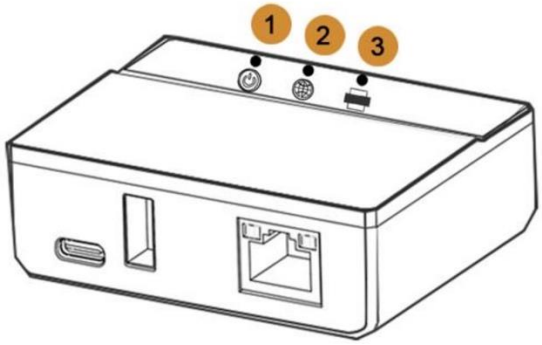
1 Port USB Print Server

Interface Description:



1. Power Port
2. USB Port For Printer
3. RJ45 Ethernet Port

Status Indication:



1. Power Status
2. Network Status
3. Printer Status

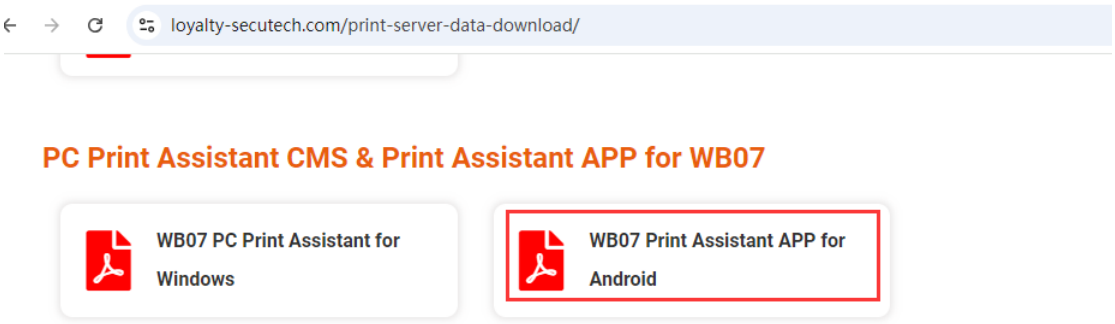
3.Cloud Print Server Quick Networking via "Print Assistant" APP

3.1 "Print Assistant" APP Download & Installation

Step 1: APP Download

To download the "Print Assistant" APP for the print server networking, please visit LOYALTY-SECU's official website at https://loyalty-secutech.com/print-server-data-download/ ,or get the "Print Assistant" APP from Google Play. Alternatively, you can contact our customer service at sales@loyalty-secu.com to obtain the "Print Assistant" APP for the print server.

Product Operation Instruction Video Link: https://loyalty-secutech.com/video/



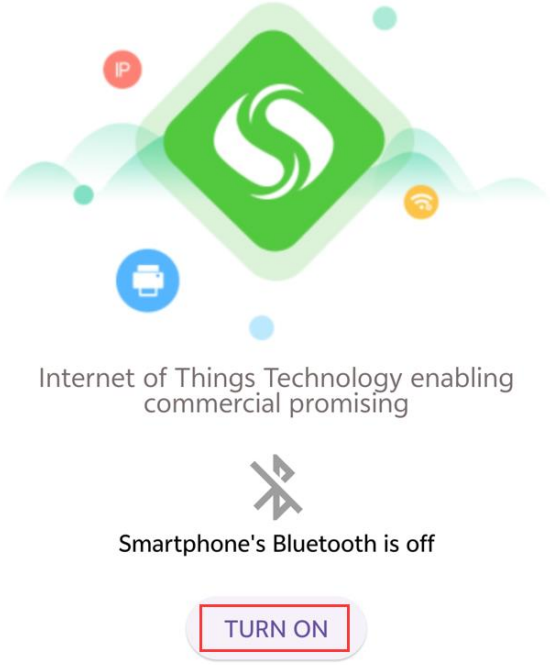
Step 2: Install the Print Assistant APP on your smartphone.

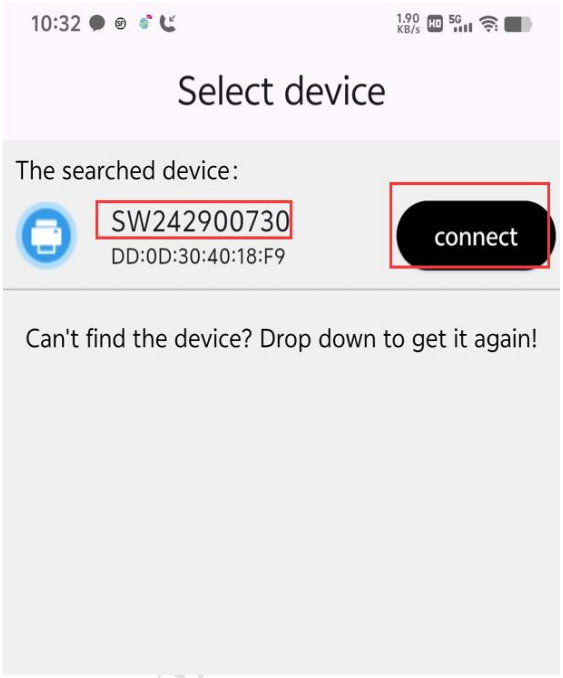
3.2 Choose the Cloud Print Server via the APP

Warm Reminder: When setting up the cloud print server, please enable Bluetooth on your phone.

Step 1: Turn on the Bluetooth function of your smartphone.
Step 2: Open the Print Assistant APP.
Step 3: Choose the target cloud print server, click "**connect**" button.
The cloud print server device name is same as device code (is on the label at the bottom of the cloud print server. For Example, Device Code: SW240834567)

As the below image shows:





3.3 Cloud Print Server Networking Via Wi-Fi Method

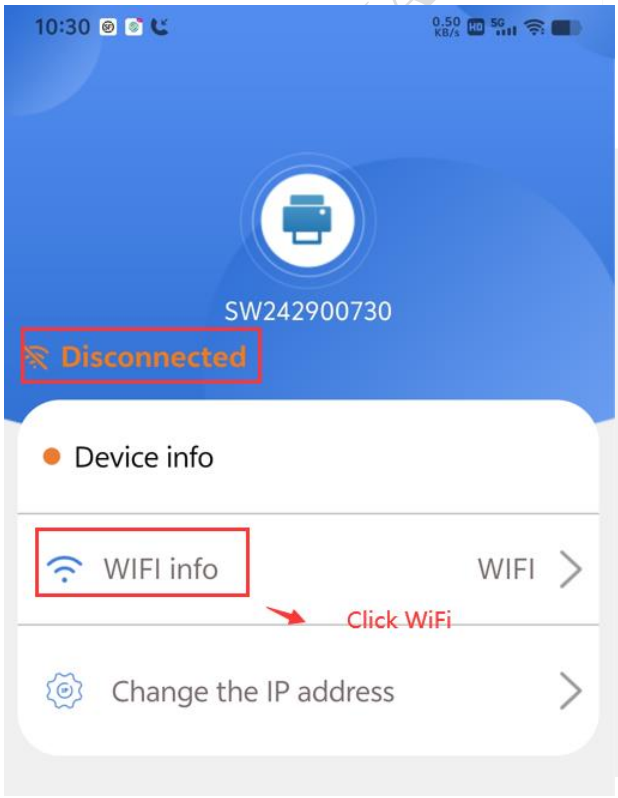
Step 1: After selected the cloud print server device, enter the configuration interface

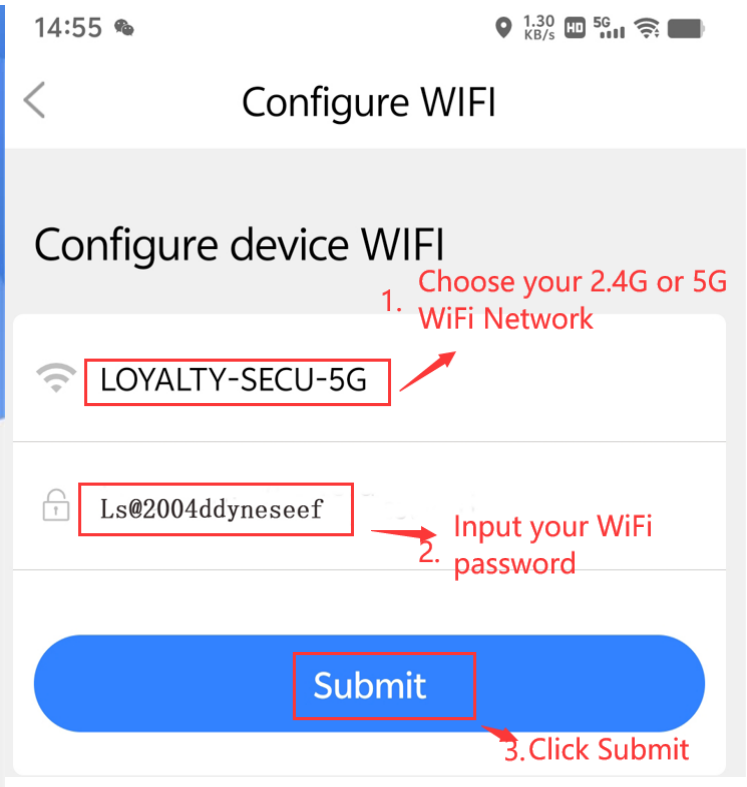
Step 2: Choose your WiFi network (2.4G or 5G network) and input the corresponding WiFi Password. (Wi-Fi name supports manual input)

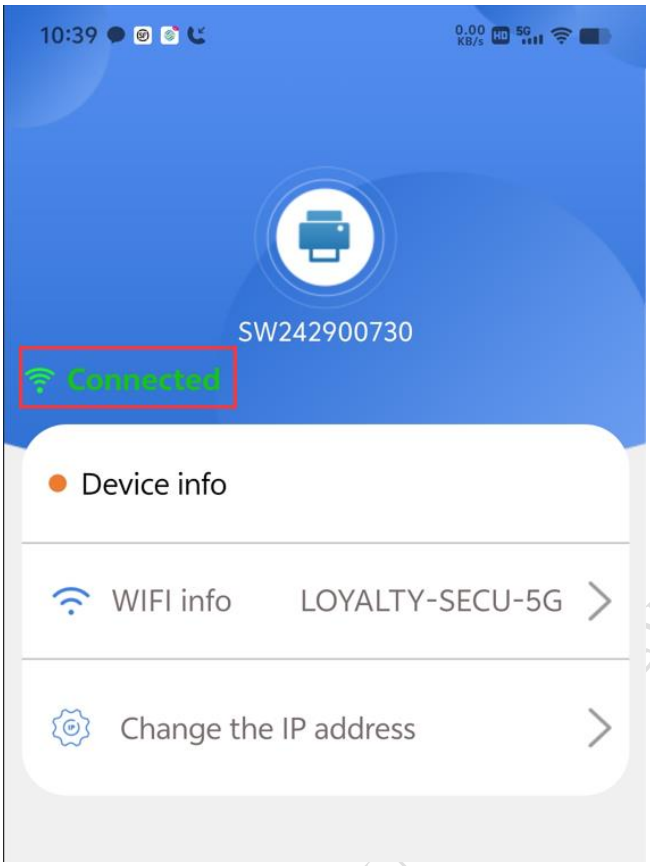
Step 3: Click "**Submit**" Button, connect the cloud print server to your router via WiFi method.

Step 4: In the APP, it shows the cloud print server "**Connected**"

As the below images shows:







3.4 Introduction to Network Connection Status

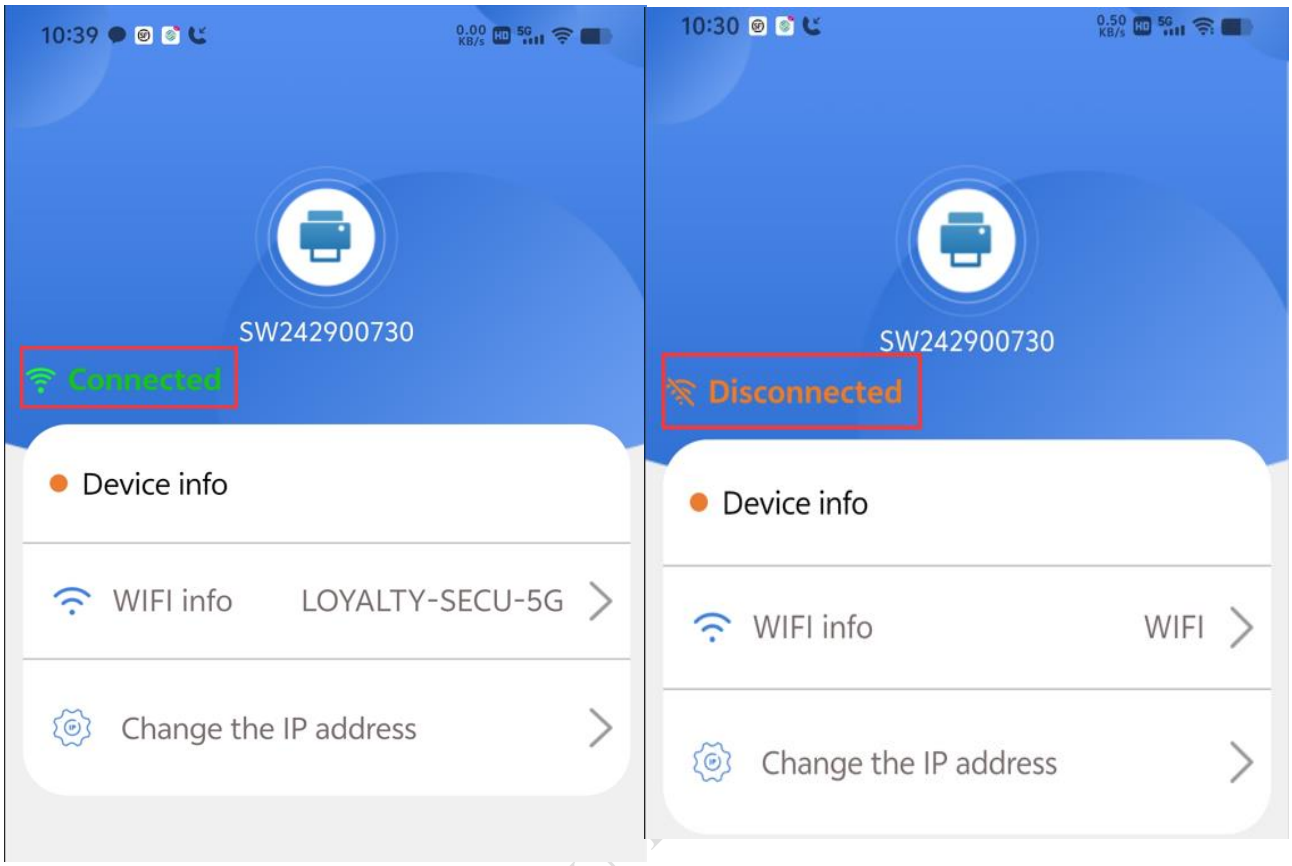
1.When the app interface displays ' **Connected**' it indicates successful network configuration, and the cloud print server has successfully connected to the cloud server."

2. When the app interface displays '**Disconnected**' it indicates that the device is not connected to the specified Wi-Fi network. Please check whether the Wi-Fi name and password are correct, and then reconfigure the Wi-Fi network.

3.When the interface displays '**IP Obtained** ' it indicates that the device is connected to the current router but not to the cloud service. At this point, the following troubleshooting steps need to be taken:

1. Check whether the router has external network functionality.
2. Check if the print server is configured with a static IP and ensure that the static IP subnet (network segment) is consistent with the current router."

The “**Connected**” & “**Disconnected**” status, as the below images showing:

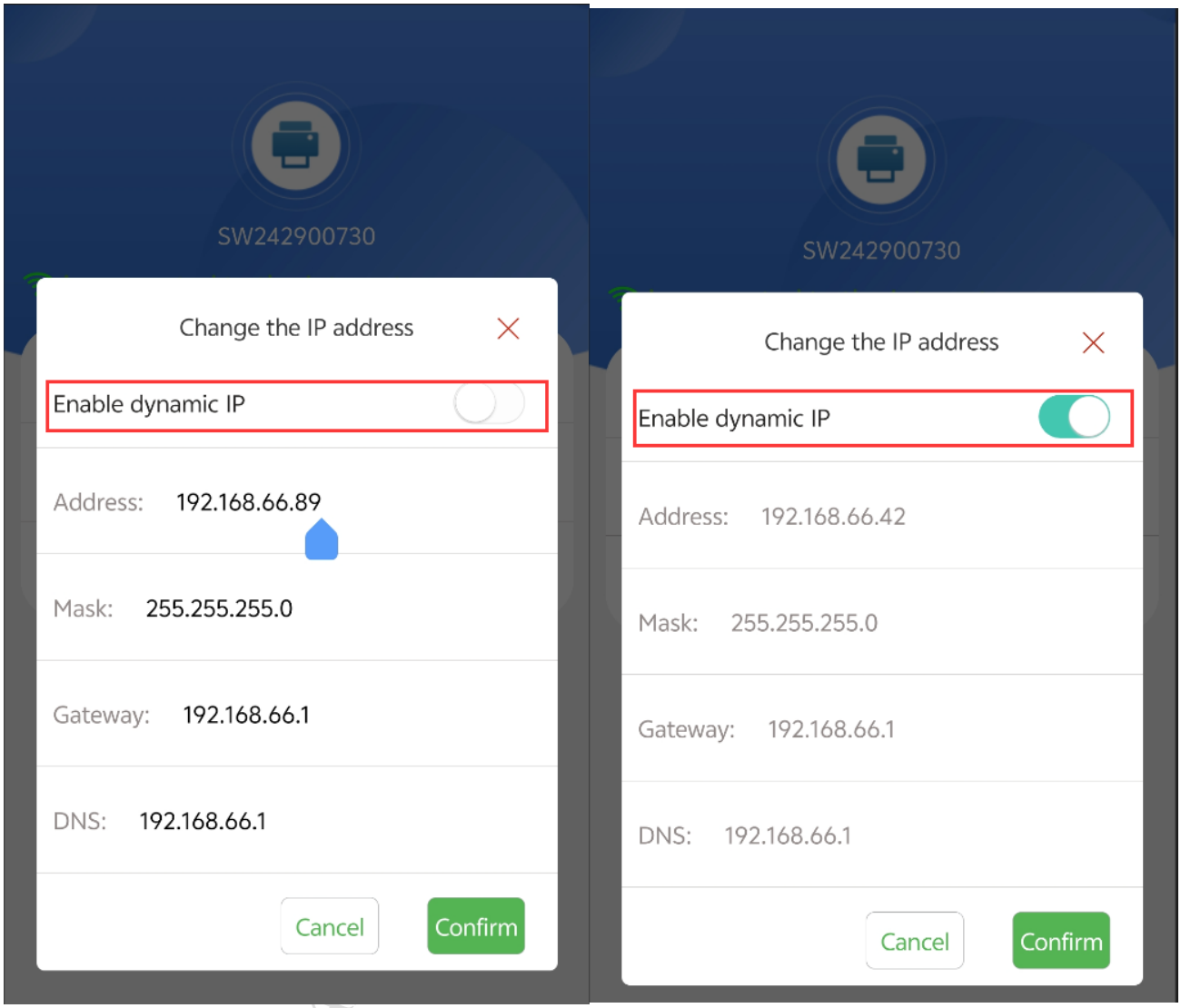


3.5 Cloud Print Server IP Address Modification and Management.

1. On the "**Change the IP address**" interface, you can view the current IP address of the cloud print server device and manage IP address.
2. **Static IP Address Configuration:** On the "**Change the IP address** "interface, when the 'Enable Dynamic IP' switch is set to 'Off,' users can configure a static IP address."
3. **Dynamic IP Address Configuration:** On the "**Change the IP address** "interface, switch the 'Enable Dynamic IP' toggle to 'On' and click the confirm button. The cloud print server will automatically switch to dynamic IP mode."

As the below images showing:

Shenzhen LOYALTY-SECU

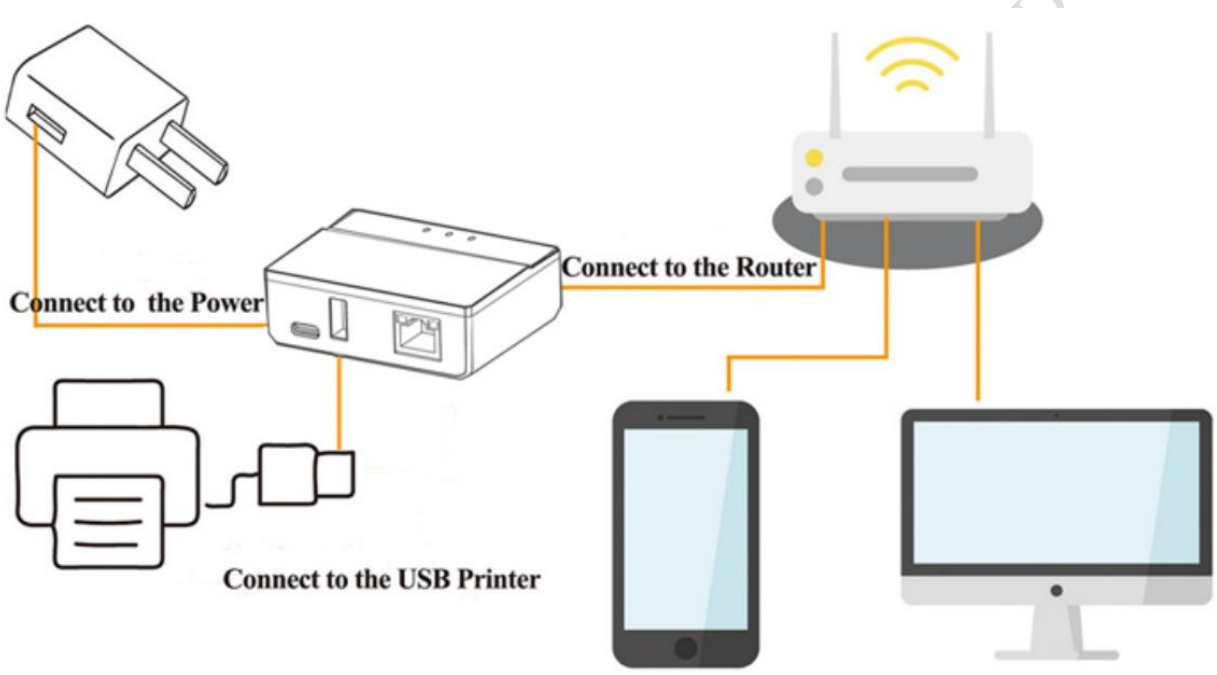


Warm Reminder:

When setting up the cloud print server, if the Wi-Fi network is unavailable, you can directly connect the print server to the router using an Ethernet cable. The router will automatically assign a dynamic IP address to the cloud print server. Users can then check the IP address of the cloud print server through the “Print Assistant” APP.

4.Print Server Quick LAN & Cloud Printing via “PC Print Assistant” for Windows System.

4.1 Workflow to Achieve the LAN/Cloud Printing:



4.2 Introduction of the PC Print Assistant

4.2.1. Definition

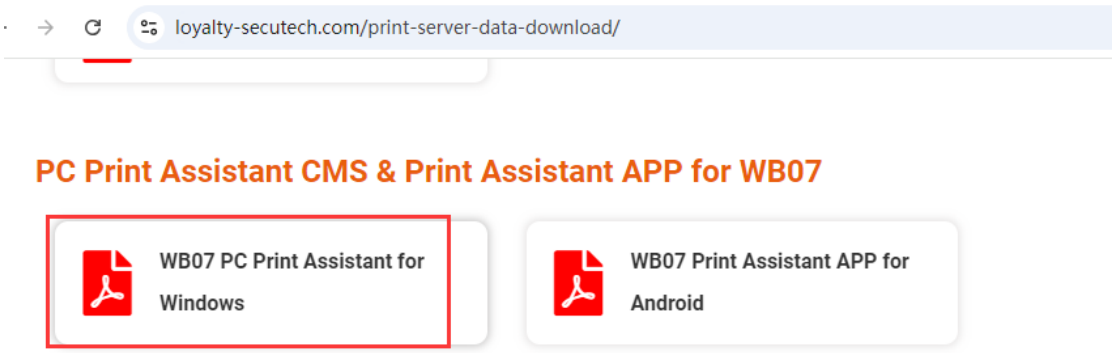
Definition	Description
Device Code	Device name for Bluetooth and LAN/Cloud Printing. Device Code is on the label at the bottom of the cloud print server. For Example, Device Code: SW240834567
Pin Code	Need to input Device Code and Pin Code in the PC Print Assistant CMS to achieve the cloud printing. Pin Code on the label at the bottom of the product.
Type	Cloud print server type for remote printing
Net	**PC Print Assistant “Net” Status Indicator**. **Offline**: means

	unable to use the cloud printing. **Online**: means Cloud printing is working. **Local:** means printing from the LAN network.
Bind Printer	Bind the USB Printer you need for LAN/Cloud printing

4.3 Cloud Print Server "PC Print Assistant" CMS Preparation (for Windows OS only)

4.3.1 PC Print Assistant Download

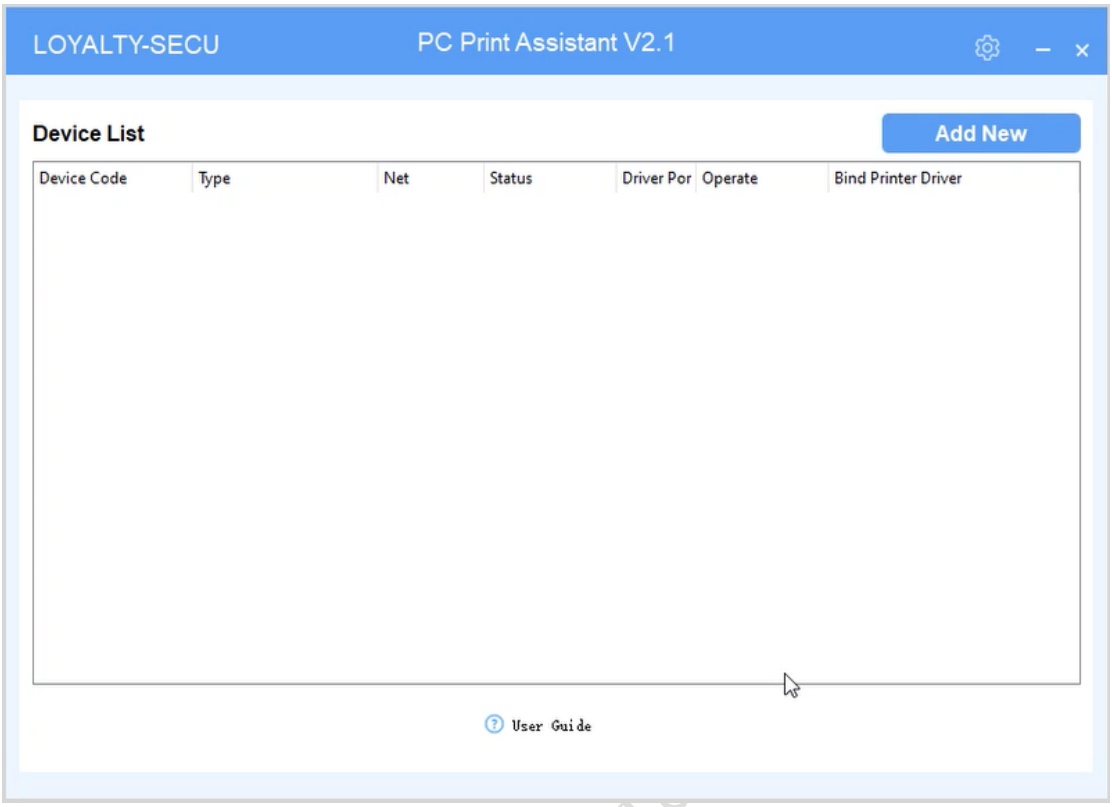
To download the PC Print Assistant for the print server, please visit LOYALTY-SECU's official website at https://loyalty-secutech.com/print-server-data-download/ . Alternatively, you can contact our customer service at sales@loyalty-secu.com to obtain the PC Print Assistant for the print server.
Product Operation Instruction Video Link: https://loyalty-secutech.com/video/



4.3.2 PC Print Assistant Installation

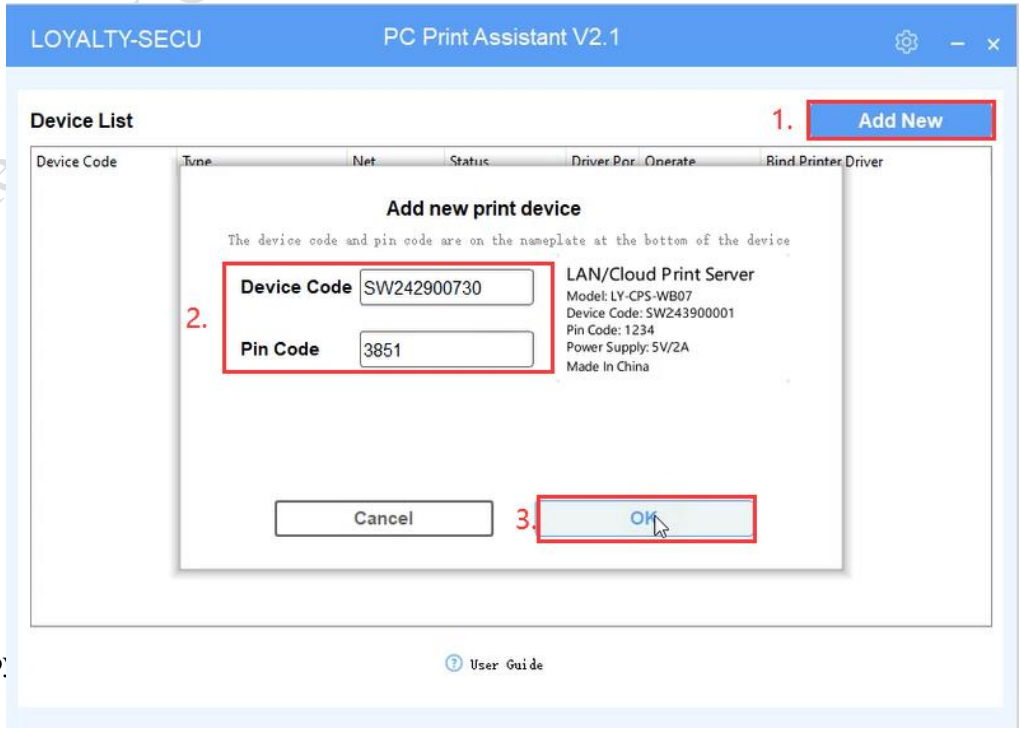
The package of print server PC Print Assistant is shown as below:

Please follow the steps to install the PC Print Assistant on your PC, after installed the CMS successfully, is shown as below:



4.4 Add A Cloud Print Server in PC Print Assistant

1.Click "**Add New**" Button
2.Input Device Code & Pin Code (Device Code & Pin Code are on the label at the bottom of the product.)
3.Click "**OK**" Button.
As the below image shows:



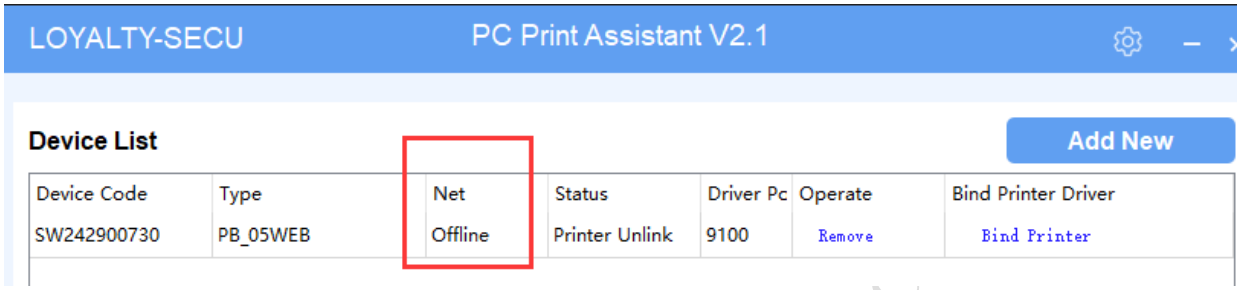
PC Print Assistant “Net” Status Indicator:

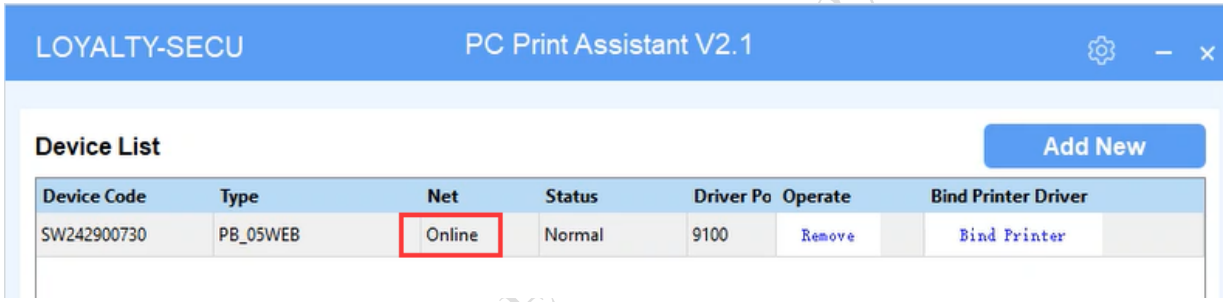
Offline: means unable to use the cloud & LAN printing.

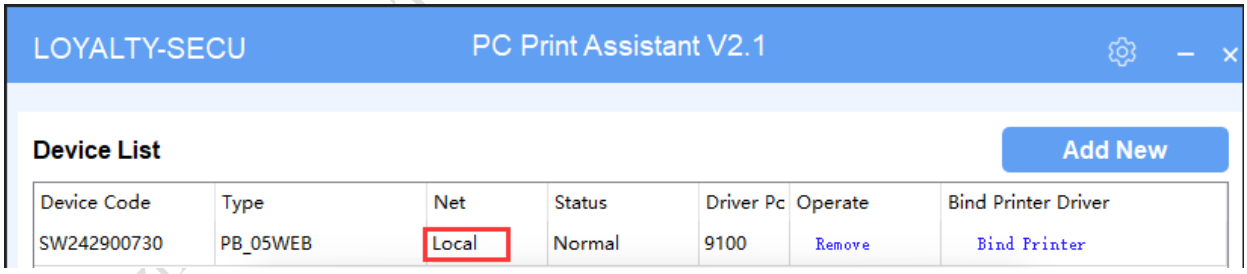
Online: means Cloud printing is working.

Local: means printing from the LAN network.

As the below images showing:







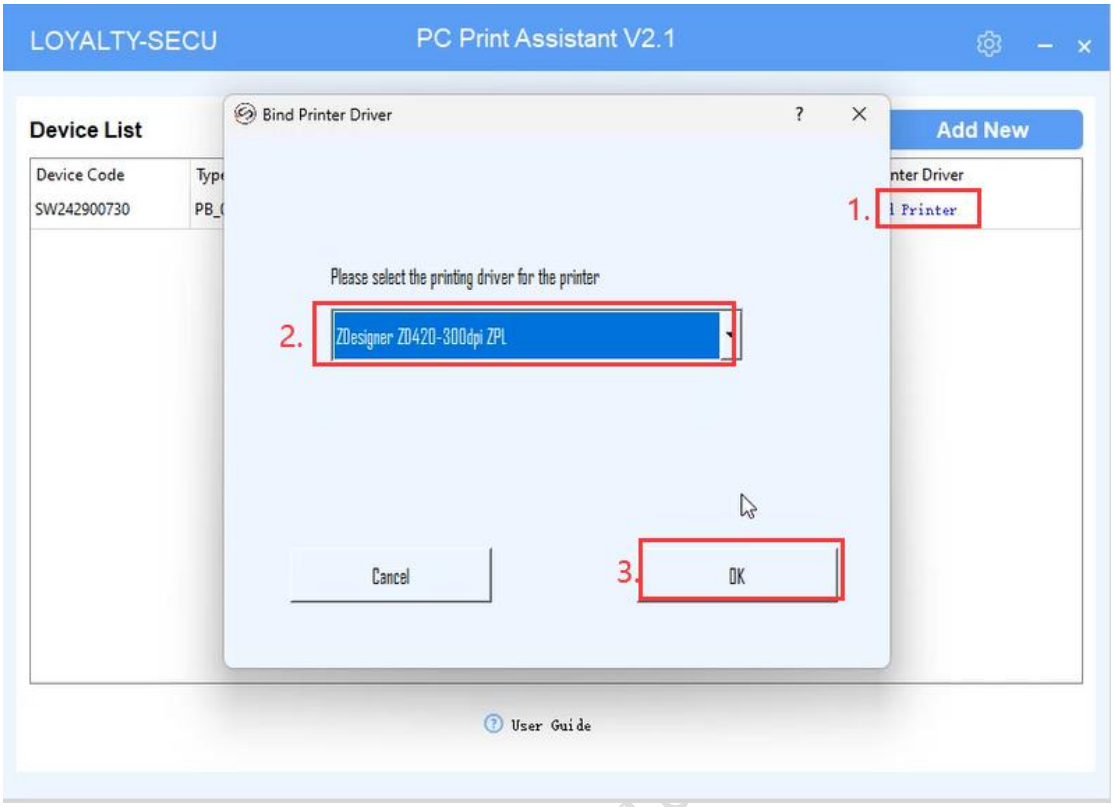
4.5 Bind the USB Printer for the Cloud Print Server

1.Click “**Bind Printer**” Button

2.Select the printer driver for your USB printer

3.Click” **OK**” Button

As the below image shows:



Warm Reminder: Please refer to the workflow, connect all devices properly, and ensure that the print server is online, and the printer is turned on. Otherwise, LAN and cloud printing will not be possible.

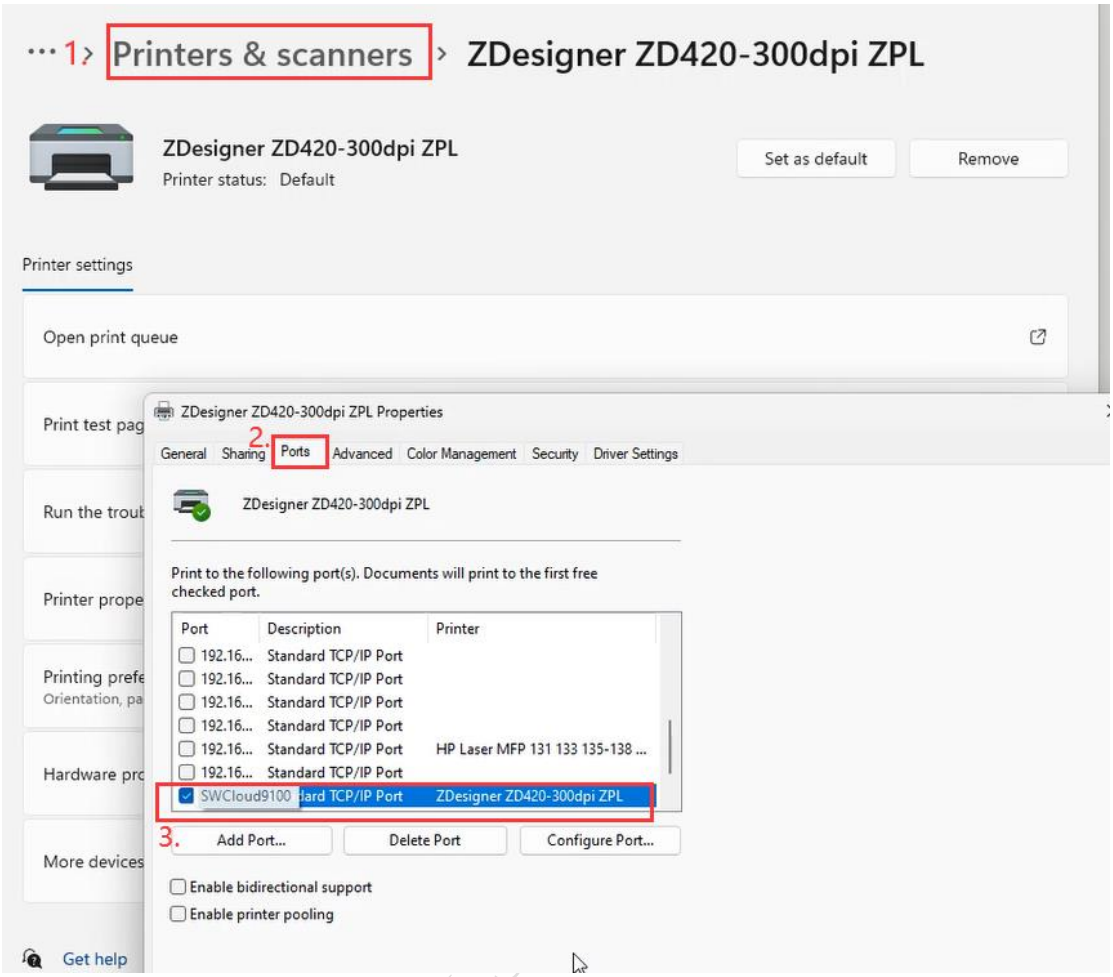
4.6 Exploring the LAN/Cloud Printing via PC Print Assistant

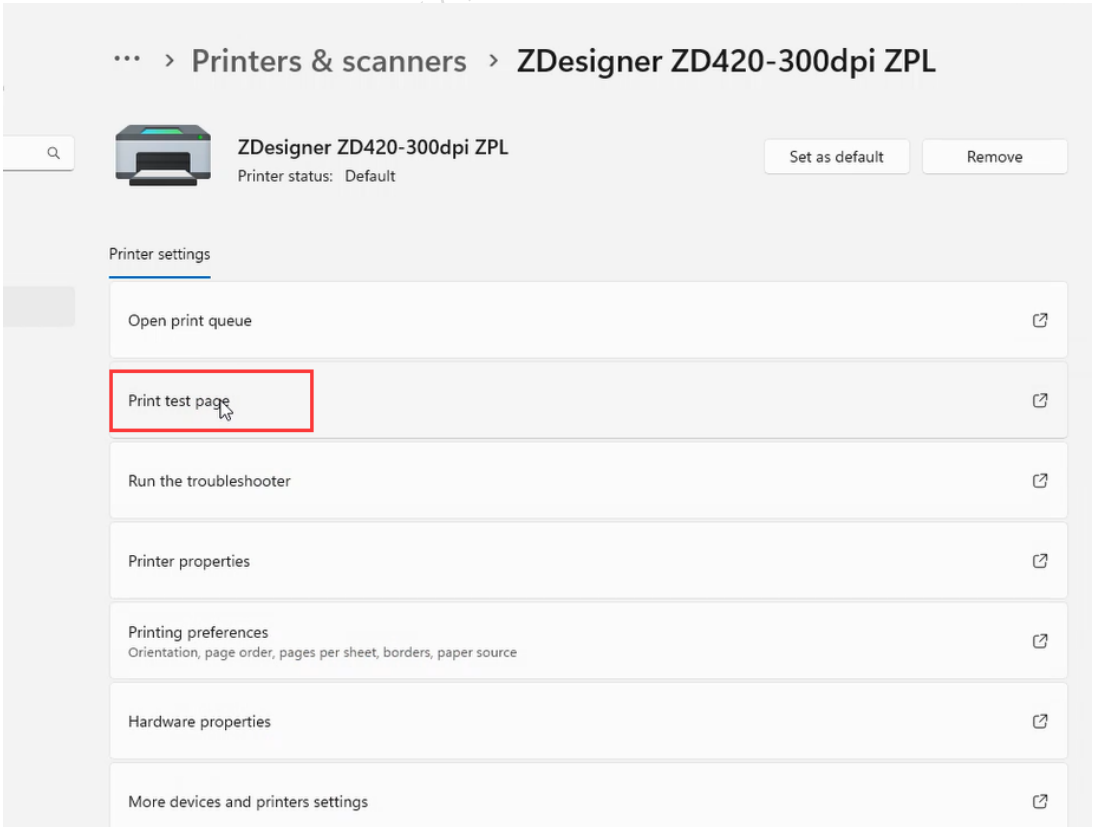
Warm Reminder: During the printing process, please keep the "PC Print Assistant" running and do not close the software, otherwise, printing will not be possible.

1. Go to "**Printers & Scanners**" to choose the target printer
2. Check the Printer "**Ports**" whether used the SWCloud9100
3. Run a "**Print Test Page**"

As the below images showing:

Shenzhen LOYALTY-SECU Technology


1
Printers & scanners
ZDesigner ZD420-300dpi ZPL
ZDesigner ZD420-300dpi ZPL
Printer status: Default
Set as default
Remove
Printer settings
Open print queue
Print test pag
Run the troub
Printer prope
Printing prefe
Orientation, pa
Hardware pro
More devices
Get help
ZDesigner ZD420-300dpi ZPL Properties
2.
General
Sharing
Ports
Advanced
Color Management
Security
Driver Settings
ZDesigner ZD420-300dpi ZPL
Print to the following port(s). Documents will print to the first free checked port.
Port
Description
Printer
192.16... Standard TCP/IP Port
192.16... Standard TCP/IP Port
192.16... Standard TCP/IP Port
192.16... Standard TCP/IP Port
192.16... Standard TCP/IP Port
HP Laser MFP 131 133 135-138 ...
192.16... Standard TCP/IP Port
SWCloud9100 dard TCP/IP Port
ZDesigner ZD420-300dpi ZPL
3.
Add Port...
Delete Port
Configure Port...
Enable bidirectional support
Enable printer pooling


Printers & scanners
ZDesigner ZD420-300dpi ZPL
ZDesigner ZD420-300dpi ZPL
Printer status: Default
Set as default
Remove
Printer settings
Open print queue
Print test page
Run the troubleshooter
Printer properties
Printing preferences
Orientation, page order, pages per sheet, borders, paper source
Hardware properties
More devices and printers settings

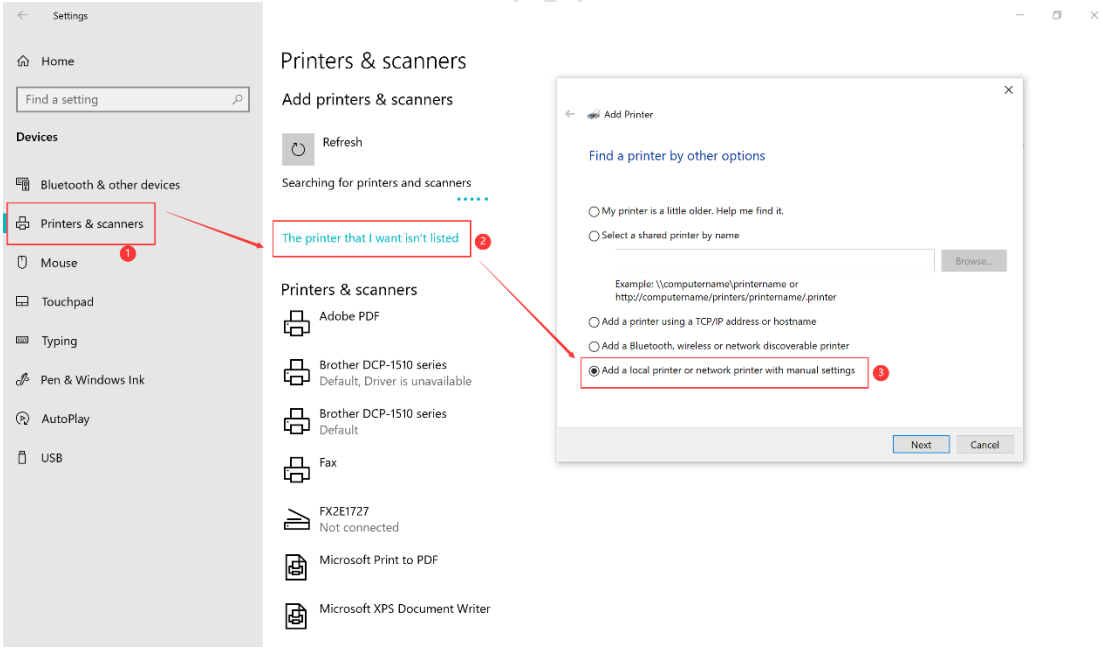
5.How to Configure Computer for Printing via LAN Printing (Without using PC Print Assistant)?

Product Operation Instruction Video Link: https://loyalty-secutech.com/video/

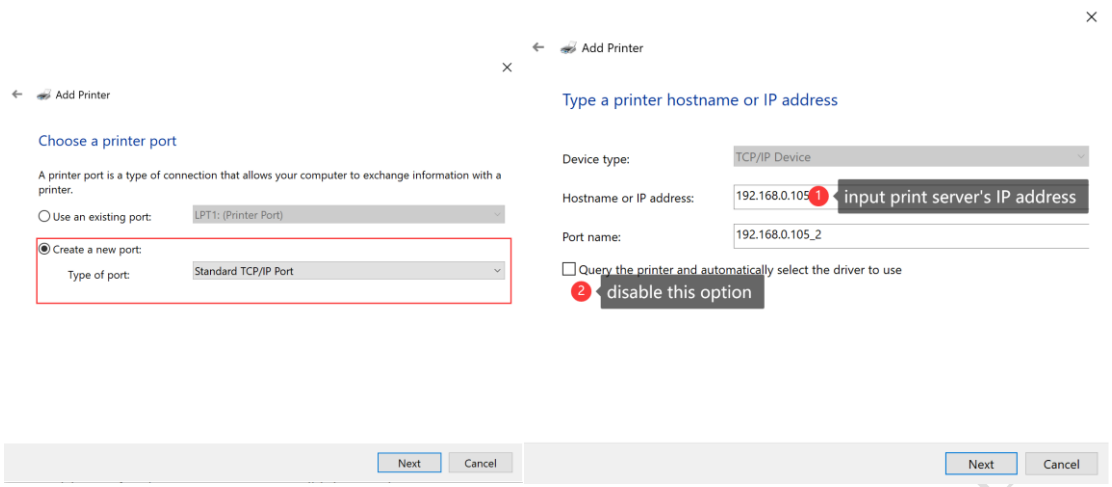
5.1 Taking Windows 11 operating system as an example

Note: After completing the Network configuration between the print server and the “Print Assistant” APP, you need to add a printer to the computer for printing. Follow these steps:

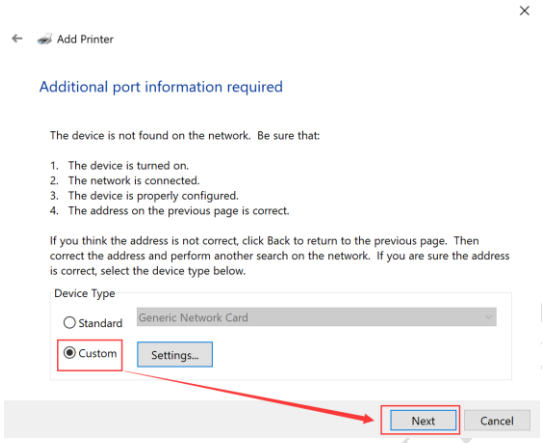
1. Click the "**Start**" menu and select "**Settings**".
2. Choose "**Devices**" and then select "**Printers & scanners**".
3. Click on "**Add a printer or scanner**". If you don't find your printer in the list, click on "**The printer that I want isn't listed**" and choose option ③ as shown below:



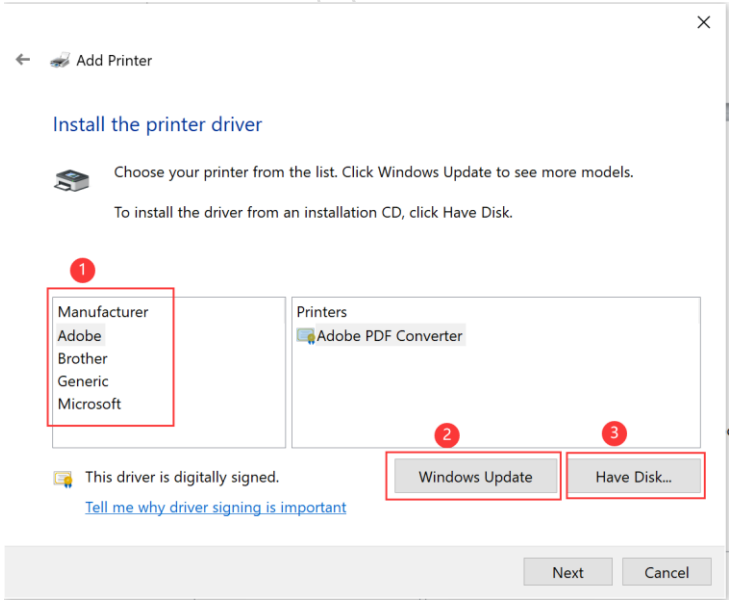
Click "**Create a new port**" and select "**Standard TCP/IP Port**" as the type of port. Then click the "**Next**" button as shown below:



Click the "**Next**" button to continue, which will display the setting interface as shown below. Choose "**Custom**" and click "**Next**" to proceed to the next step:



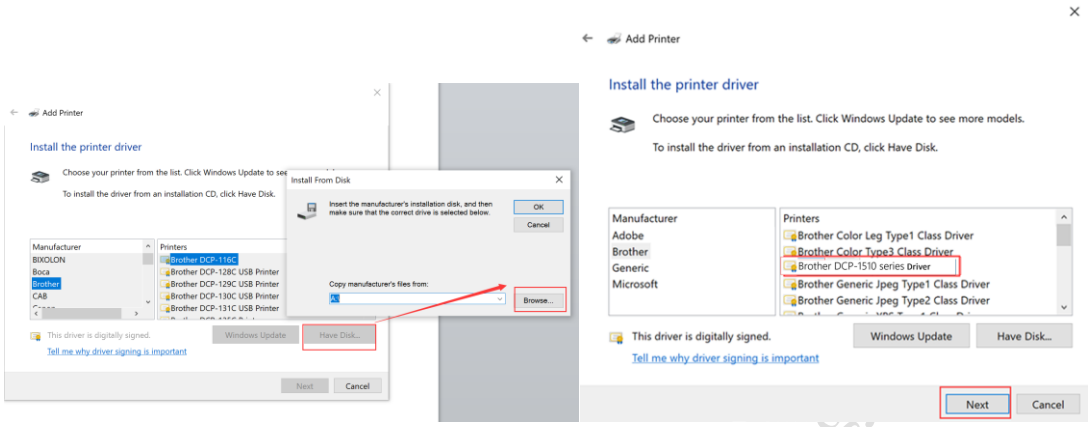
If you cannot find the printer driver for your specific brand and model in the list (①), you can obtain it from options ② and ③, as shown below:



After clicking "**Windows Update**," a list of printer driver brands will be displayed, as shown below:

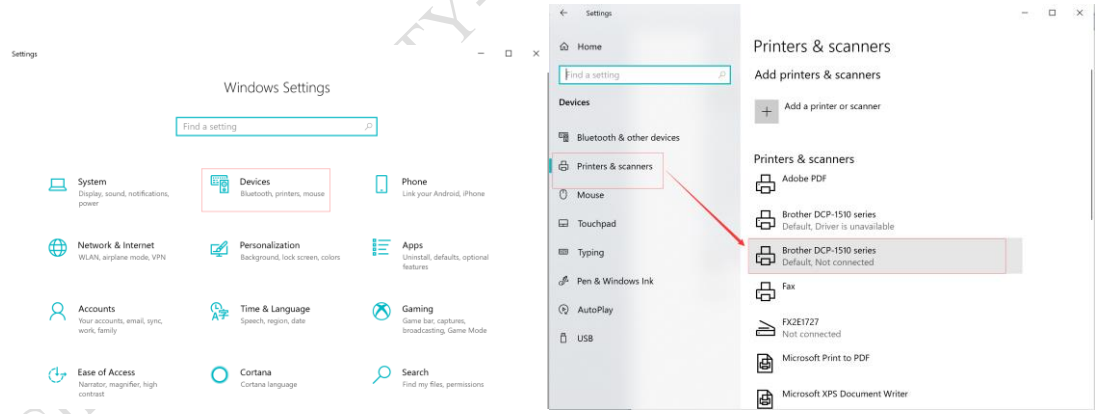
If you cannot find the printer driver for your specific brand and model, please click on "**Have Disk**" and copy the printer driver provided by your USB printer manufacturer from your disk. Follow the instructions to install the driver into the computer.

Please refer to the image below for reference:

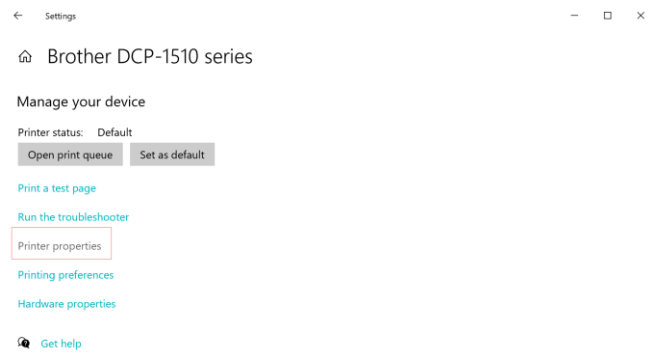


Note: If you are unable to obtain the printer driver from "**Windows Update**" or "**Have Disk**", you can try connecting your USB printer directly to the computer. This will allow the computer to install the printer driver automatically. Alternatively, you can contact your USB printer supplier to obtain the appropriate printer driver.

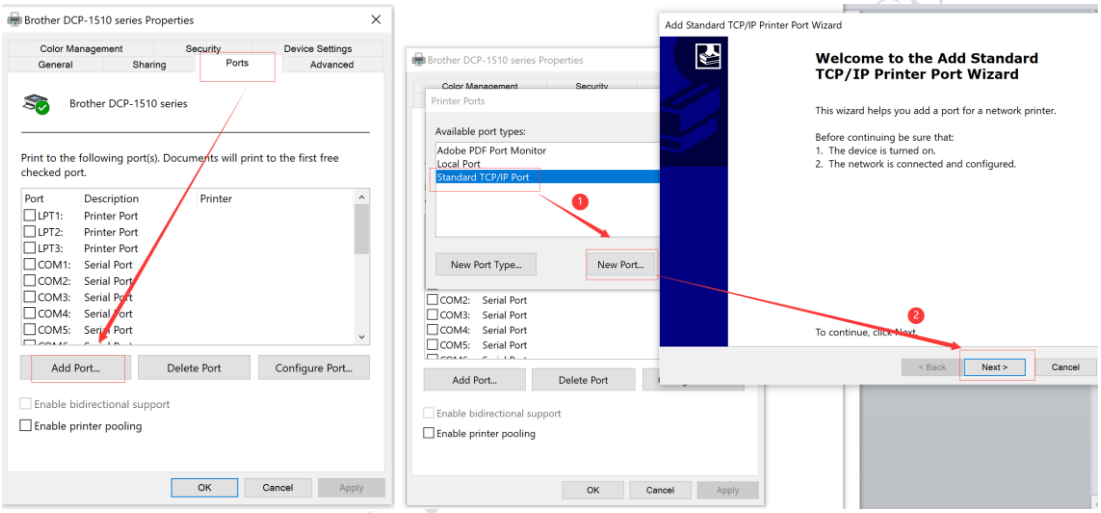
After completing the installation, click "**Next**". Then, click on the "**Start**" menu, choose "**Settings**", select "**Devices**", and click on "**Printers & Scanners**". Finally, choose the target printer as shown below:



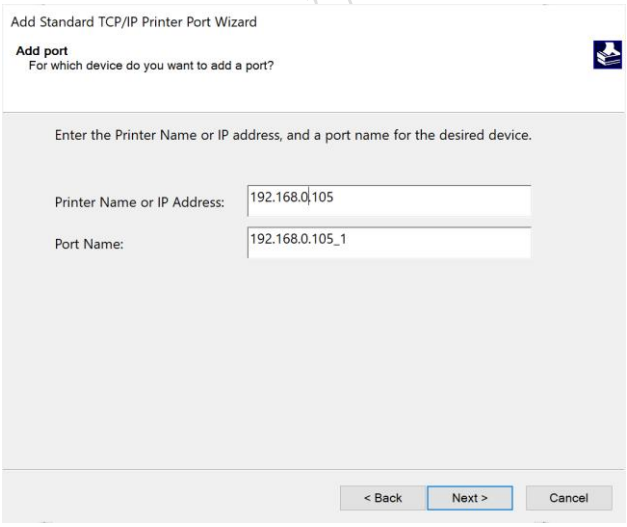
Right-click on the "**Brother DCP-1510 series**" printer and select "Printer Properties" as shown below:

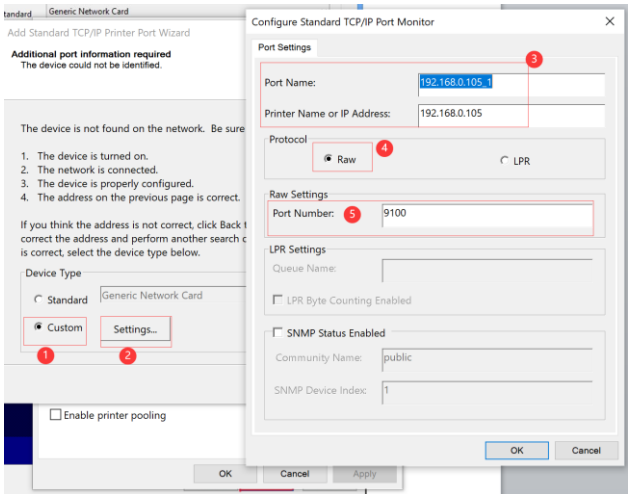


Select "**Ports**" and click on "**Add Port**". Choose "**Standard TCP/IP Port**" and click on "**New Port**" and "**Next**" as shown below:



Enter the IP address of the Print Server, select "**Custom**", and click on "**Settings**" as shown below:



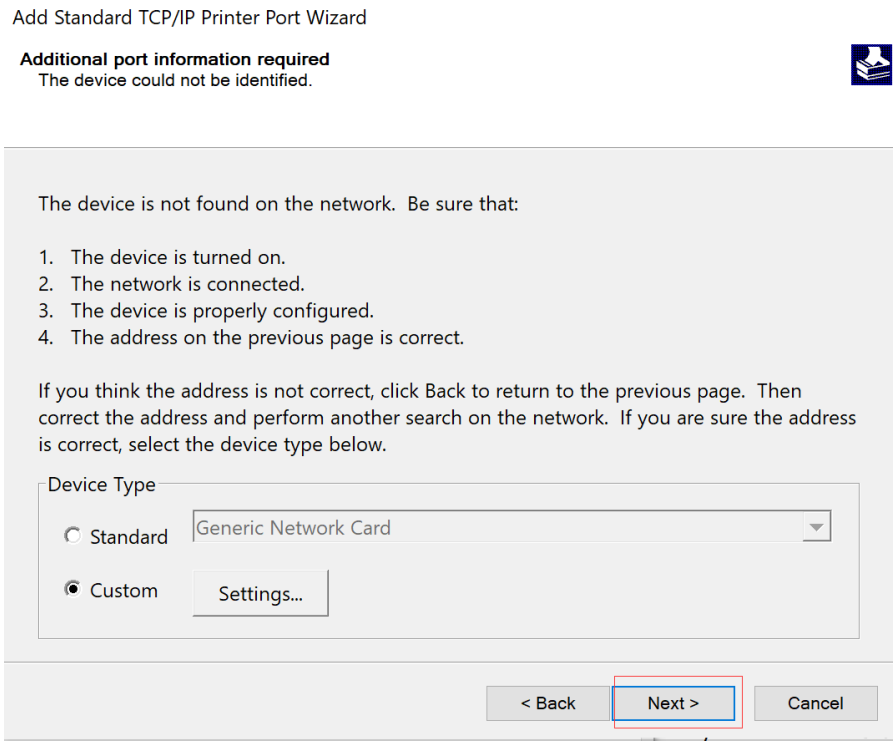


Warm Reminder:

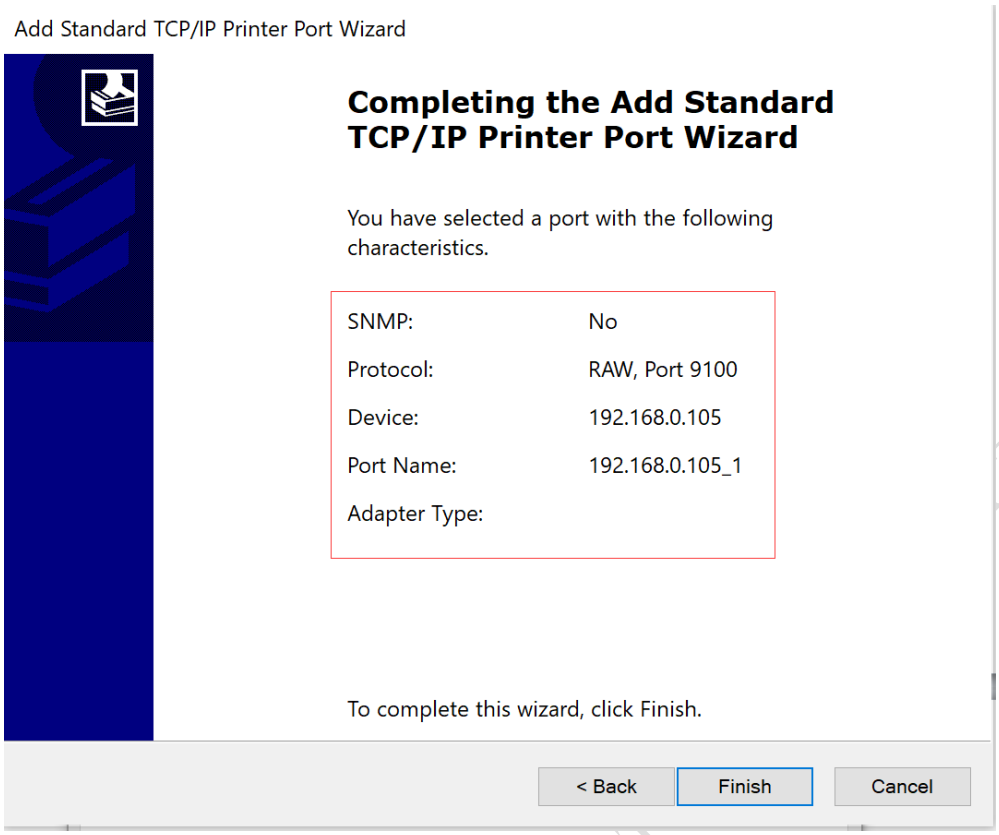
Please obtain the print server IP address from the Network Configuration APP (Print Assistant)

Please ensure that the IP address③ and Port Number⑤ match the settings of the print server, and the Protocol ④ is set to Raw. You can verify this information in the "Network" interface of the print server using the “Print Assistant” APP to have a double-check.

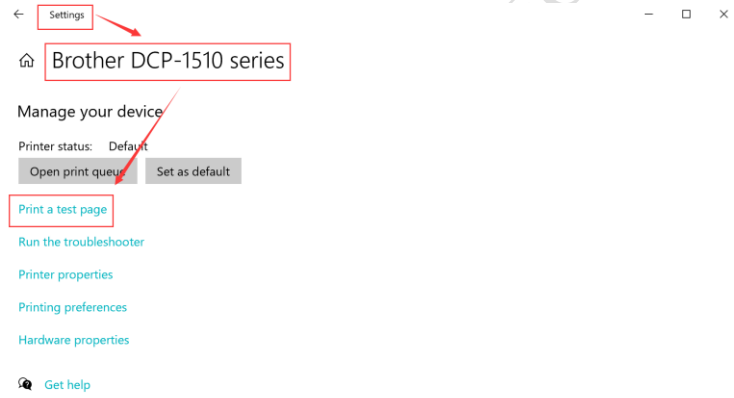
Once you have completed the above "**Port Settings**", please click "**OK**" to proceed. Then, click "**Next**" as shown below:



After successfully adding the TCP/IP port, the printer's IP address and port number will be displayed as shown below:



Now that all the settings are completed, you can proceed to print a test page to confirm if the configuration is successful. Please refer to the image below for the steps:



5.2 Taking Mac operating system as an example

Product Operation Instruction Video Link: https://loyalty-secutech.com/video/

- ✓ Ensure that the MAC computer is able to print directly when connected to the USB printer. This will ensure that the printer and MAC system are compatible and functioning properly.
- ✓
- ✓ It is important to know that the MAC system can only recognize USB printers with the 9100 port. Printers with ports 9101, 9102, or 9103 may not be recognized by the MAC system.

✓

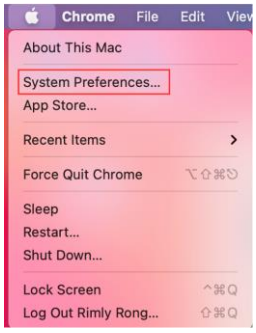
✓ The MAC system supports most brand printers such as HP, Brother, and Samsung. However, for Canon and Epson printers, the support is limited to a few specific models.

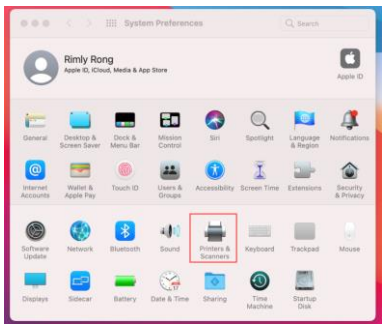
✓

✓ Keep in mind that the MAC system supports printing via the HP Jetdirect-Socket Protocol, but it does not support the IPP (Internet Printing Protocol) or LPD (Line Printer Daemon) protocols.

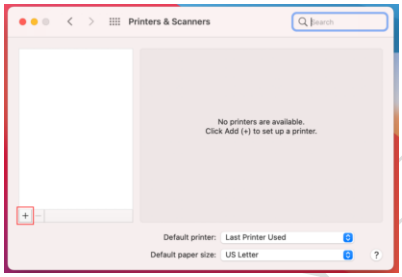
To add a printer on a Mac system, follow these steps:

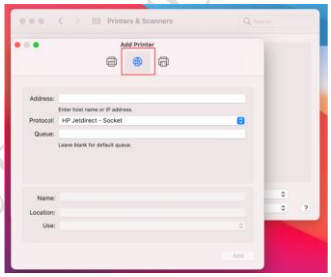
1. Click on "**System Preferences**" in the Apple menu.
2. Select "**Printers & Scanners**" from the preferences panel as shown below:





Click the "**+**" button to add the printer. Select the "**IP**" option and enter the printer information as shown below:





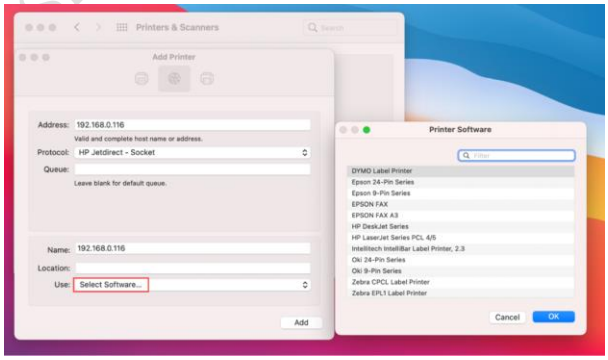
Note:

Address: Enter the IP Address or Host Name of the print server.

Protocol: Select HP Jetdirect-Socket (this protocol is commonly used by HP and other printer manufacturers).

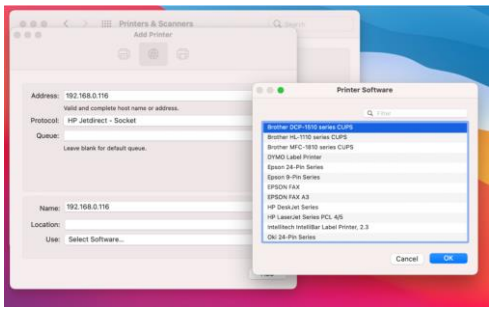
Use: Choose Software.

For the remaining items, leave the default options unchanged, as shown below:

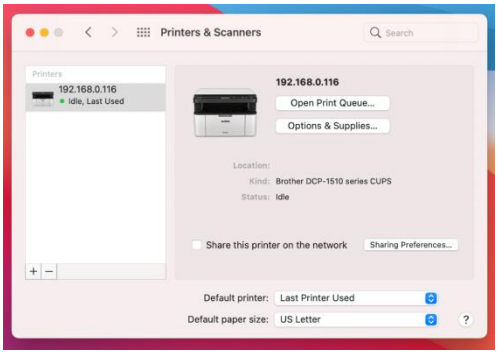


Select the appropriate printer software from the list. You can use the "Filter" function for a quick

search. If you are unable to find your printer software in the existing list, please visit the printer's website to download the MAC driver. Once you have located the correct printer software, click "OK".



After completing the installation of the printer software, you can now proceed to explore the printing functionality.

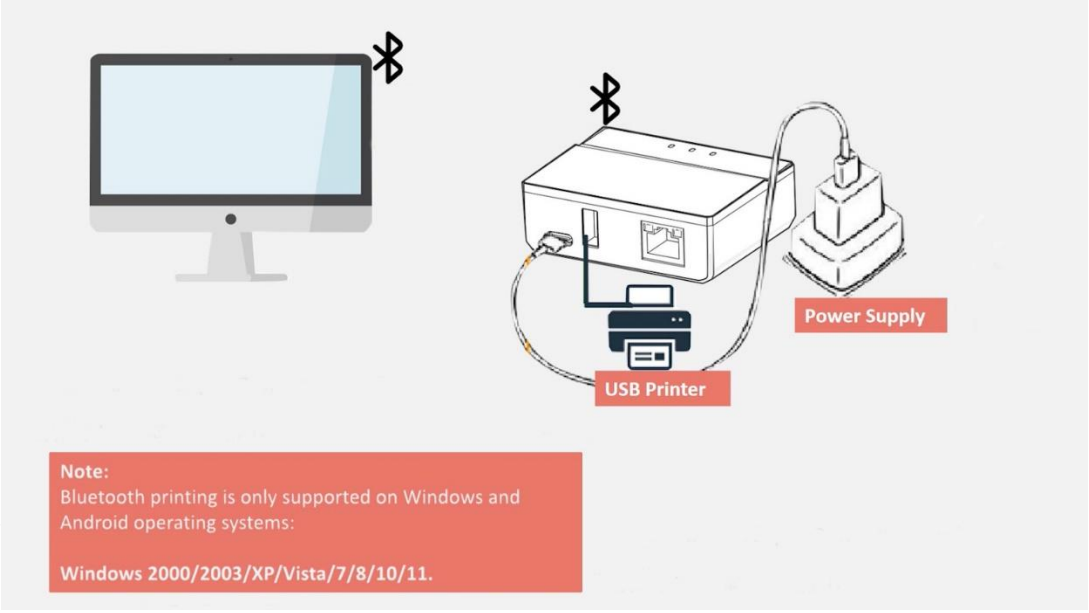


6 How to Configure a Bluetooth Device for Printing

Note: Bluetooth printing is only supported on Windows and Android operating systems.

Product Operation Instruction Video Link: https://loyalty-secutech.com/video/

Workflow to Achieve the Bluetooth Printing on Windows:



Shenzhen LOYALTY-SECU Technology Co., LTD

6.1 Bluetooth Printing via Windows OS

How to connect a print server to a computer using Bluetooth:

Step 1:

1) Connect a Bluetooth print server to your USB printer via the USB cable.

2) Power on the Bluetooth print server and your USB printer.

Then,

1) Open "**Printers & scanners**" settings.

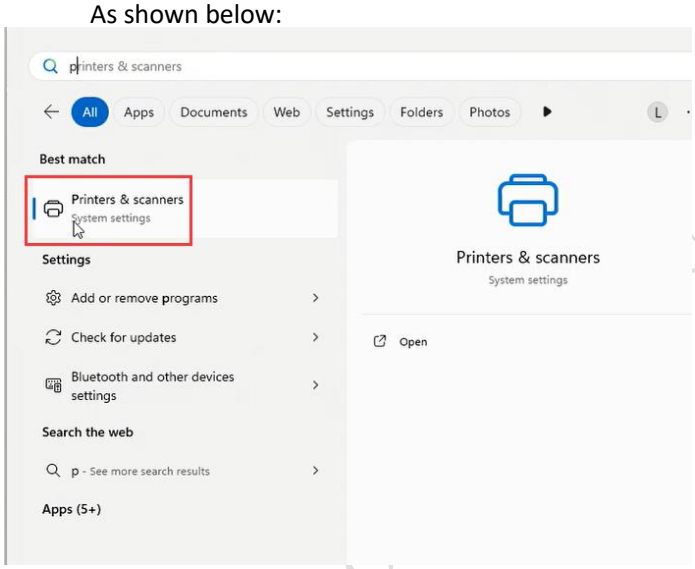
2) Click on "**Bluetooth & devices**".

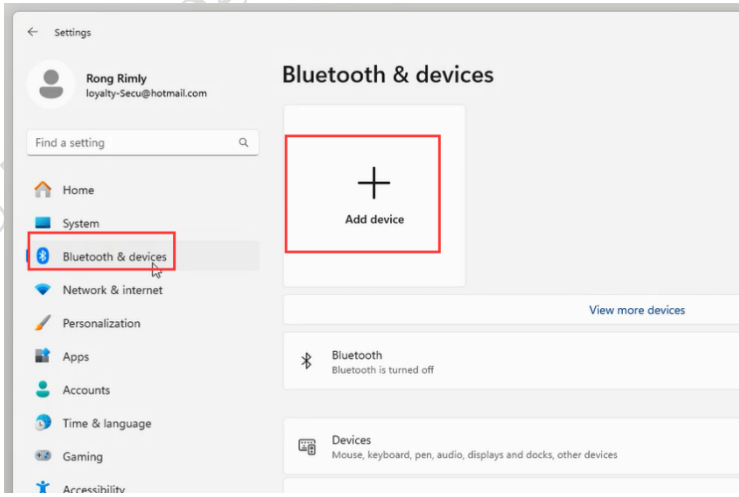
3) Turn on the Bluetooth toggle switch.

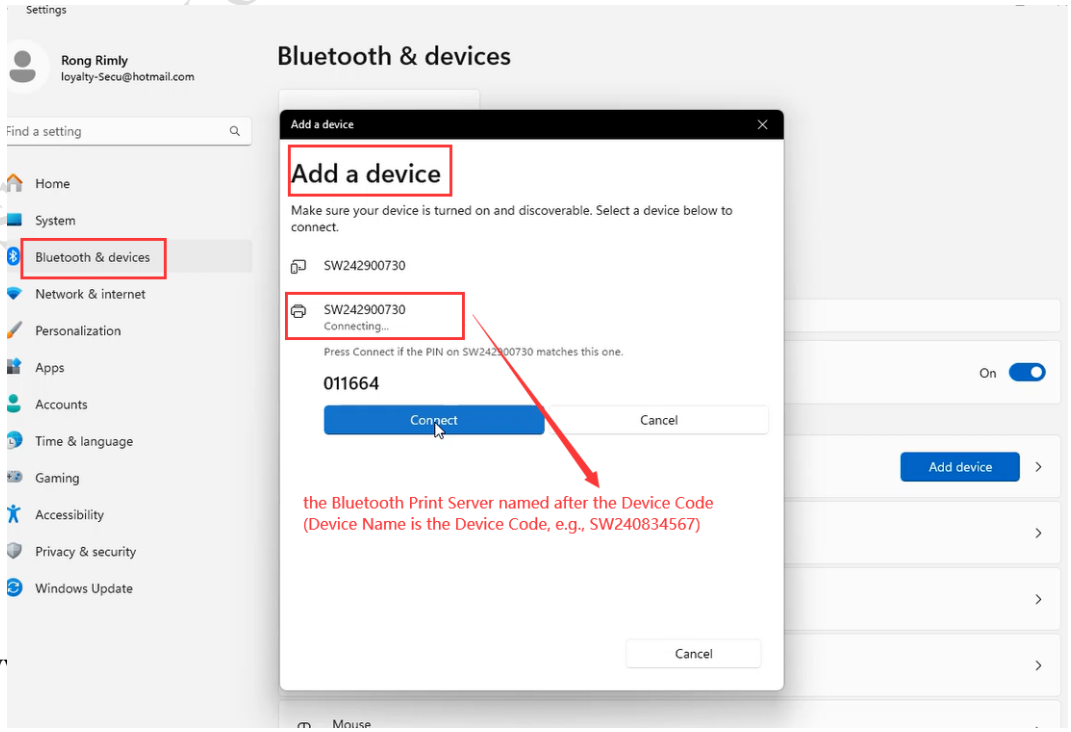
4) Click the "**Add Bluetooth or other device**" button to connect the print server.

5) Connect to the Bluetooth Print Server named after the Device Code (Device Name is the Device Code, e.g., SW240834567)

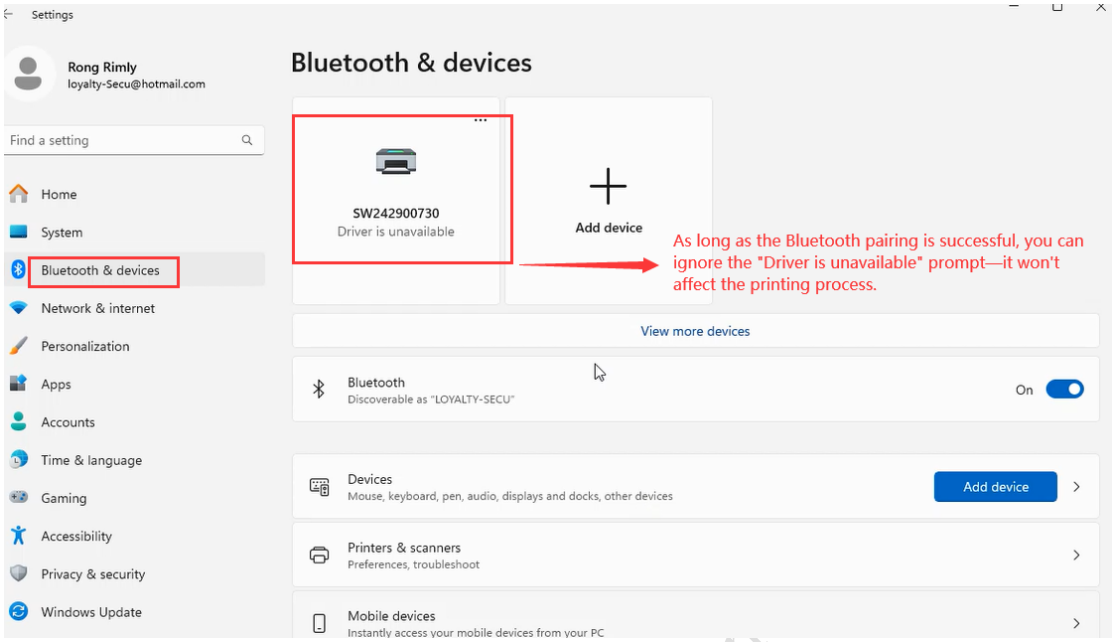
As shown below:







Note: The Bluetooth Print Server named after the Device Code (Device Name is the Device Code, e.g., SW240834567)



Warm Reminder:

1.As long as the Bluetooth pairing is successful, you can ignore the "Driver is unavailable" prompt—it won't affect the printing process.

2.The Bluetooth print server is already paired with your computer, as shown in the above images. No pin code is required for pairing.

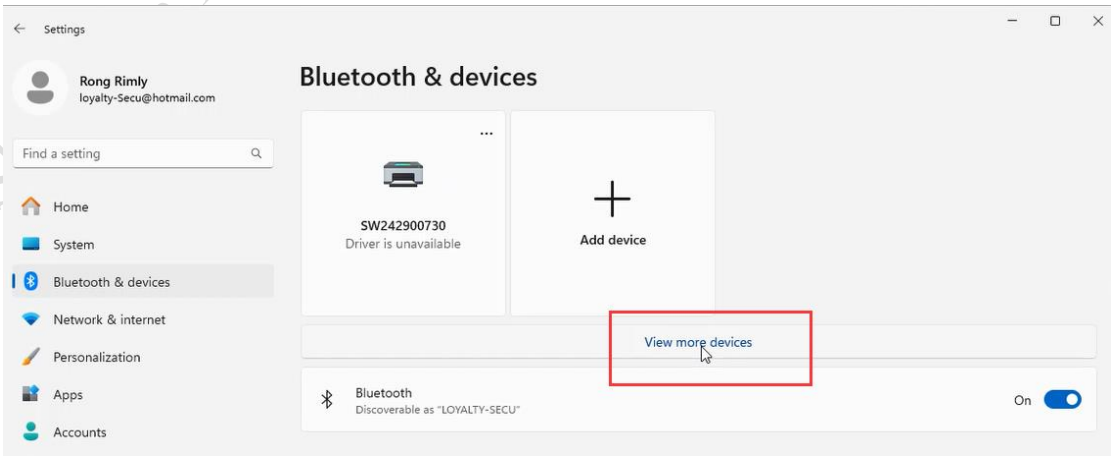
Step 2:

Obtain the Bluetooth Networking COM Number of the Print Server

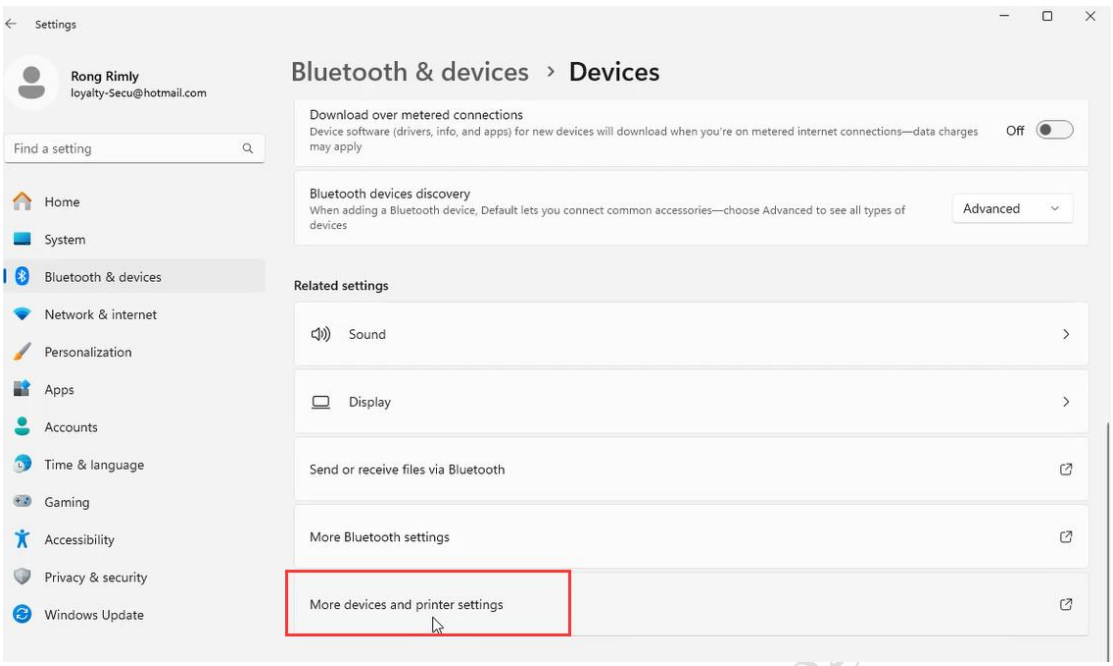
After the computer is paired with the Print Server, the Print Server will be listed in the Other Devices section, as shown below:

Click "**Devices and Printers**" to access the Bluetooth Networking COM Number.

1) Click "**View more devices**"

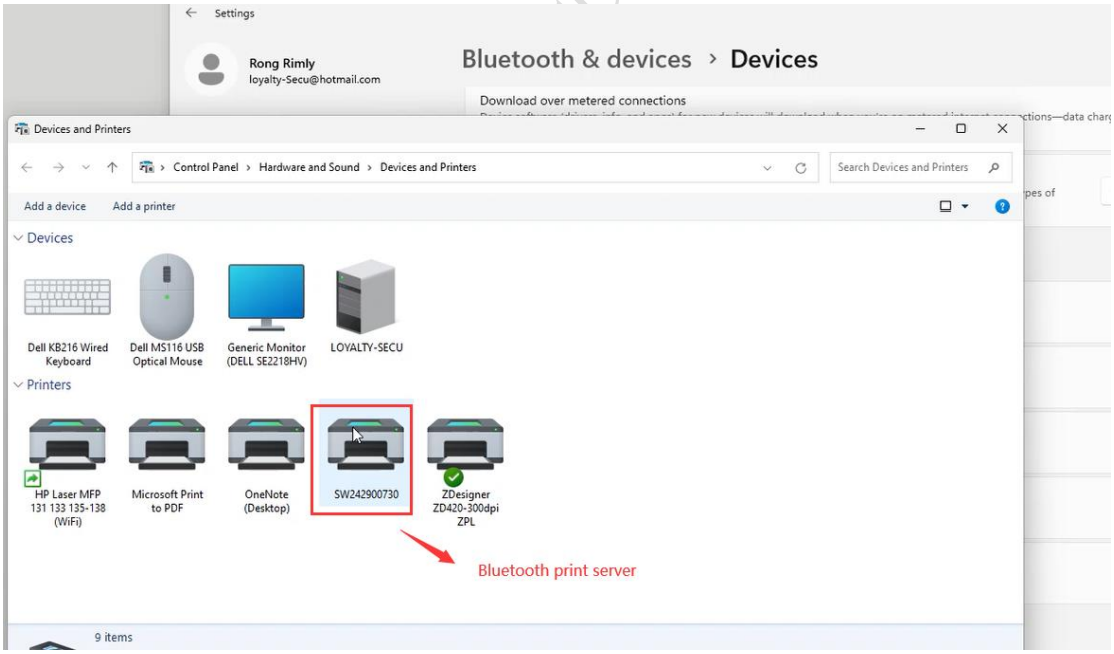


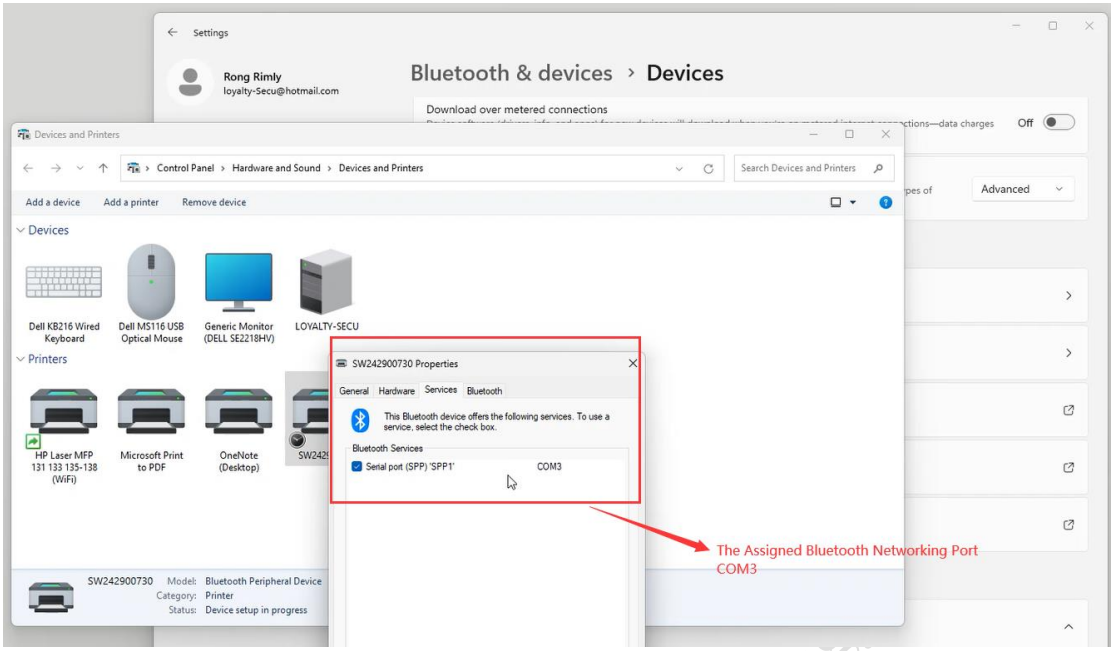
2） Choose "**More devices and printer settings**"



Right-click the "**Bluetooth Print Server**" (Device Name is the Device Code, e.g., SW240834567) -> "**Print Server Properties**" -> Choose "**Services**" to obtain the Print Server Bluetooth SPP Port Number, as shown below:

Bluetooth Networking Port SPP: COM3





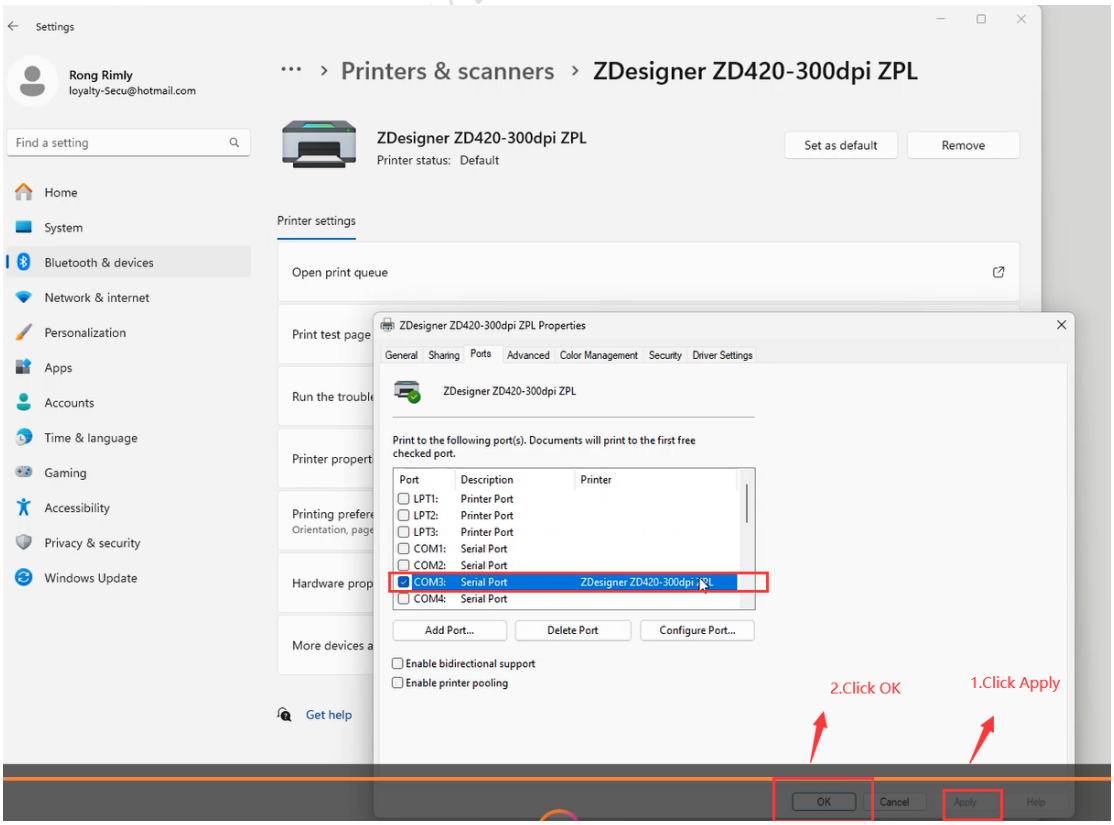
Warm Reminder:

The Bluetooth networking COM number of the print server will vary and be assigned randomly by each computer.

Step 3:

Choose the corresponding COM Number for the USB Printer.

Select " **ZDsigner ZD420-300dpi ZPL** " -> "**Printer Properties**" -> Choose Port "**COM3**" -> Click "**Apply**"-> click "**OK**".

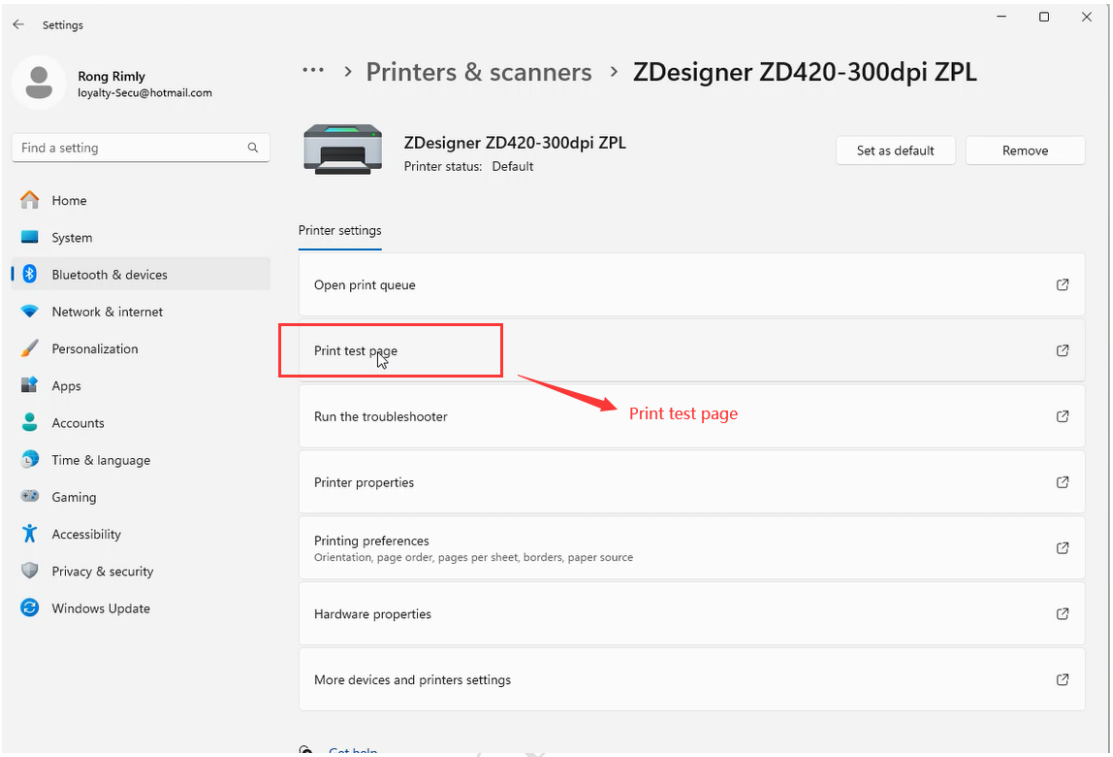


Now all the settings for Bluetooth printing on a Windows OS computer are complete.

Step 4:

You can now explore printing via the Bluetooth function from the computer to the printer.

Select " **ZDsigner ZD420-300dpi ZPL** " -> "**Printer Properties**" -> "**Print Test Page**".

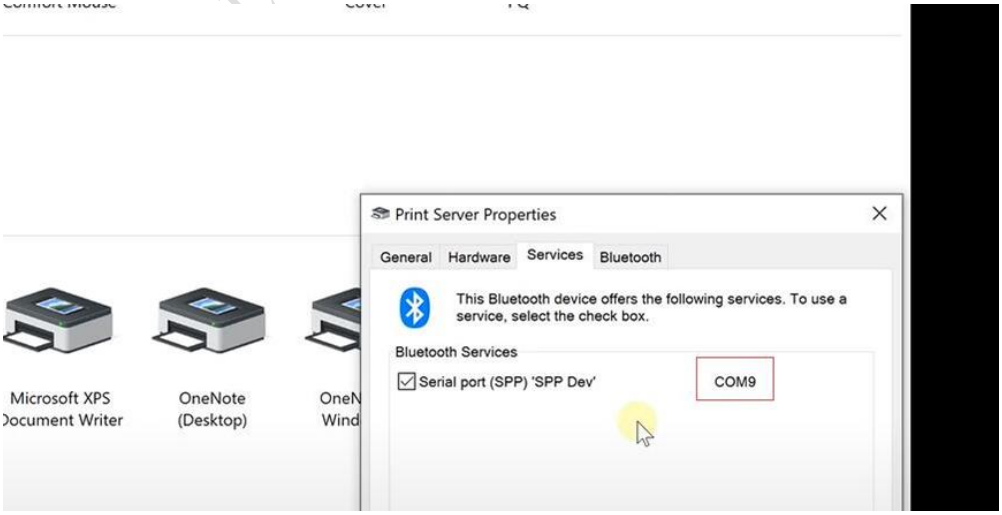


More Info:

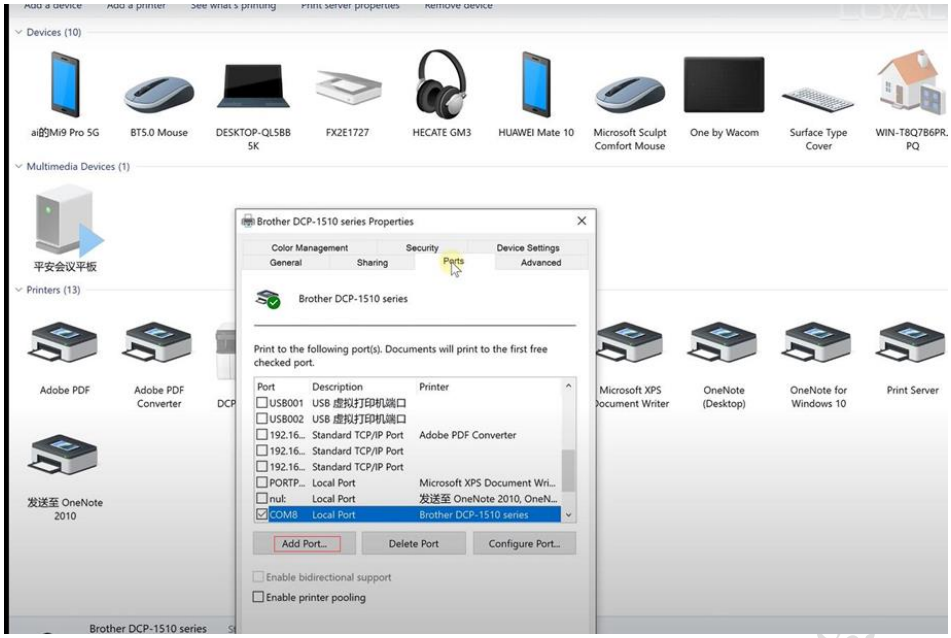
If there is no corresponding SPP COM Number on your USB Printer, please add the COM Number manually as shown in the images below:

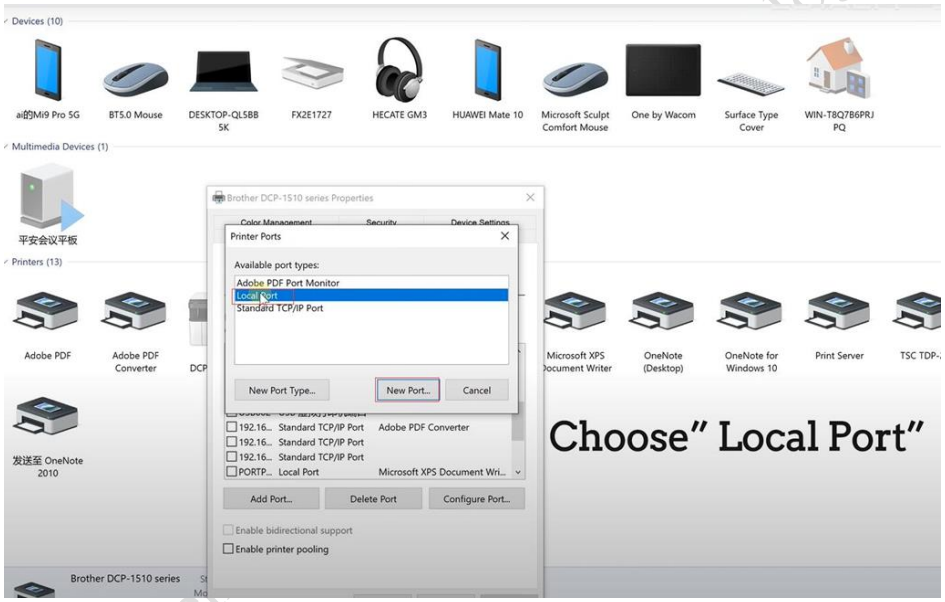
For example, if the SPP COM Number for the Bluetooth print server is COM9.

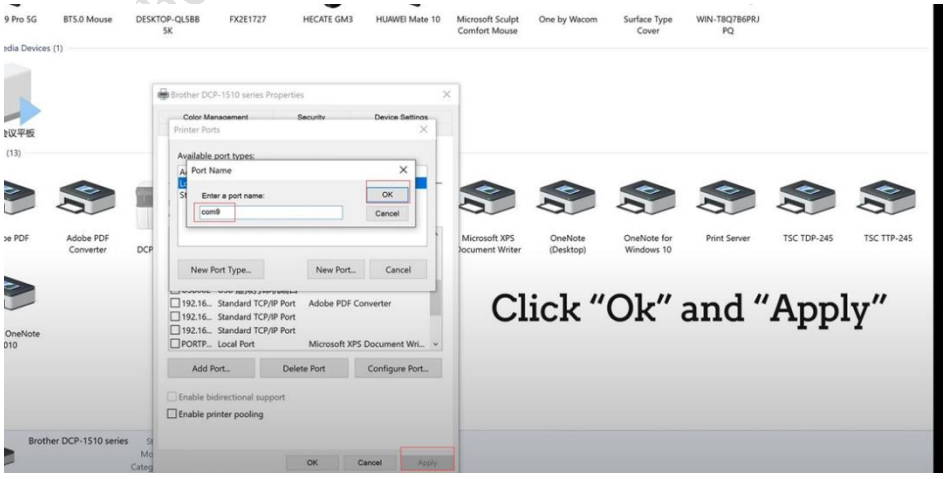
Here, using the Brother DCP-1510 Series printer as an example:

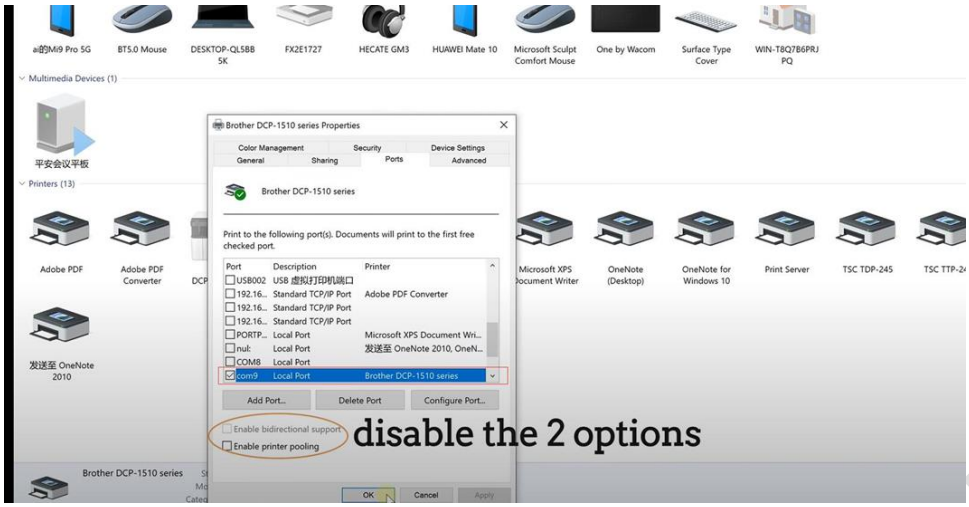


Choose "Brother DCP-1510 Series" -> "Printer Properties" -> "Ports" -> "Add Ports" -> "Local Port" -> "New Port" -> "COM9" -> "OK" -> "Apply", as shown in the image below:


Devices (10)
Multimedia Devices (1)
Printers (13)
Brother DCP-1510 series Properties
Color Management
Security
Device Settings
General
Sharing
Ports
Advanced
Brother DCP-1510 series
Print to the following port(s). Documents will print to the first free checked port.
Port
Description
Printer
Add Port...
Delete Port
Configure Port...
Enable bidirectional support
Enable printer pooling


Devices (10)
Multimedia Devices (1)
Printers (13)
Printer Ports
Available port types:
Adobe PDF Port Monitor
Local Port
Standard TCP/IP Port
New Port Type...
New Port...
Cancel
Add Port...
Delete Port
Configure Port...
Enable bidirectional support
Enable printer pooling
Choose" Local Port"


Port Name
Enter a port name:
com9
OK
Cancel
Add Port...
Delete Port
Configure Port...
Enable bidirectional support
Enable printer pooling
Click "Ok" and "Apply"



Note: Please disable the "**Enable bidirectional support**" and "**Enable printer pooling**" options. Now you can explore printing via Bluetooth from the computer to the printer.

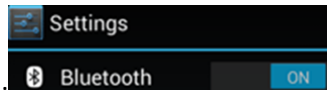
7.Bluetooth Printing via Android OS

Product Operation Instruction Video Link: https://loyalty-secutech.com/video/

Please download "PrinterShare" from the Google Play or website: http://www.printershare.com onto your Android smartphone first.

Before you start printing, you need to ensure that Bluetooth is active on your Android device and that it is paired with your printer. The first time you connect to your printer, you will need to download a driver for it, as well as document rendering libraries (such as Office or PDF) if you plan to print documents.

To ensure that Bluetooth is enabled on your Android device, go to Android Settings and make sure that Bluetooth is set to "On".

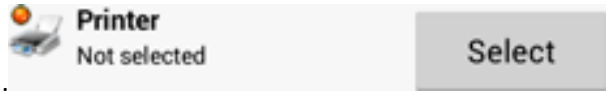


Now that you are certain that Bluetooth is active, make sure that your Android device is paired with your printer in Android Settings > Bluetooth. (No pin code required)

Take your Android device and open PrinterShare by tapping on its icon. If this is the first time you are running PrinterShare, you will see a splash screen with two buttons: "Read More" (which will provide you with general information on PrinterShare's functionality) and "Continue". Tap "Continue" once you are ready to proceed.

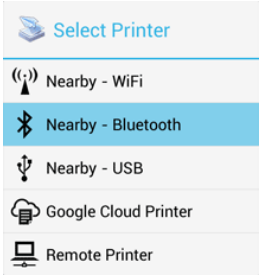
You will see the main PrinterShare screen with a grid of icons that allow you to access various items that can be printed. Below the grid of icons, you will see an icon of a printer with the text "Printer Not Selected" and a "Select" button displayed beside it. To select your Bluetooth printer, press the

Shenzhen LOYALTY-SECU Technology Co., LTD

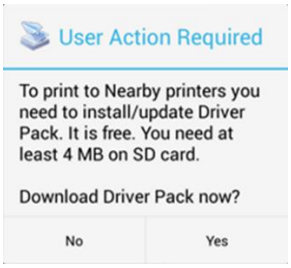


"Select" button.

Now, tap the "Nearby - Bluetooth" button and wait for the app to detect your printer.



When your printer is detected, tap on it. The app will then ask for your permission to download a driver for it, which will require at least 4MB of space on your SD card.



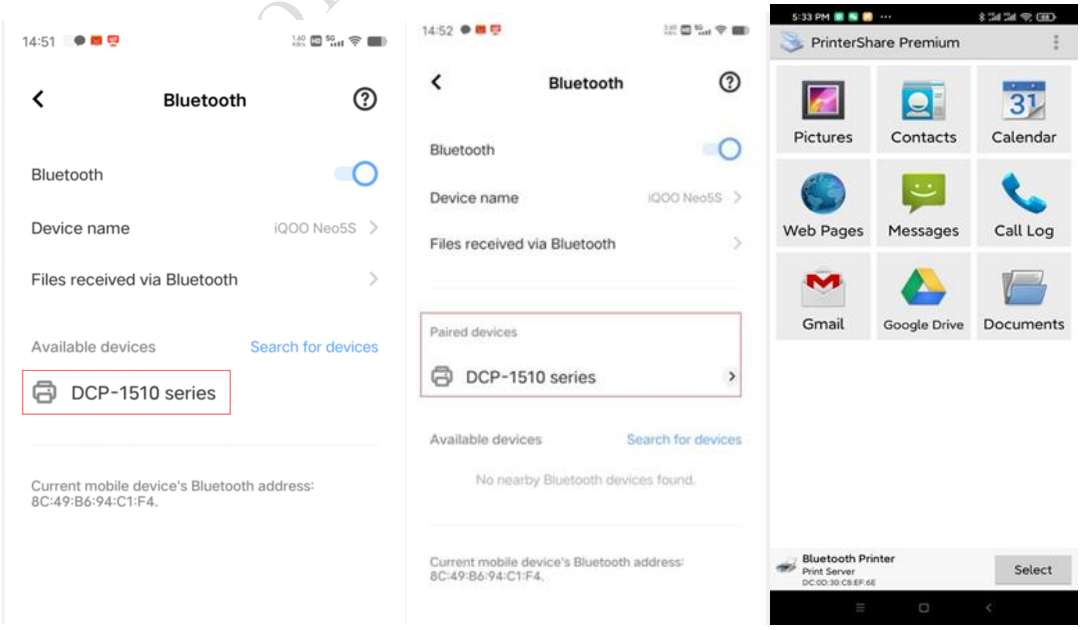
Tap "Yes" and you will be ready to print once the app finishes downloading and installing the driver pack.

Here's the demonstration of the setup:

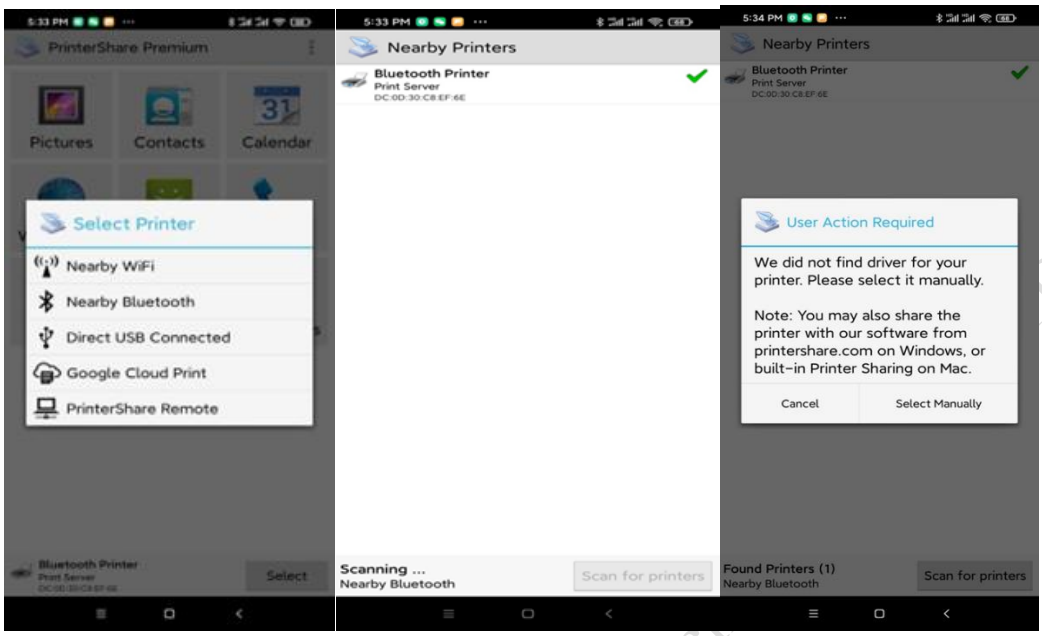
Step 1: Connect the Bluetooth print server to the USB printer using a USB cable.

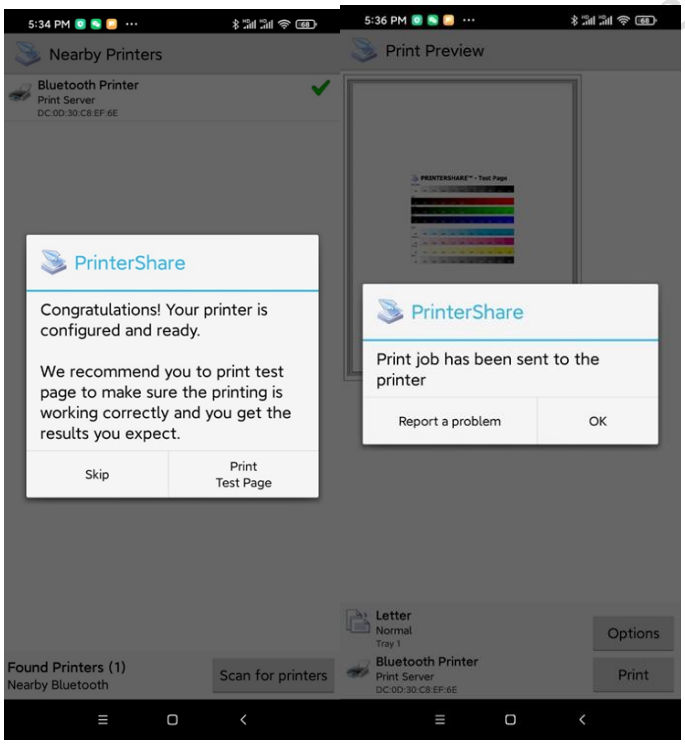
Step 2: Power on the print server and USB printer.

Note: The Bluetooth print server will be automatically named after the connected USB printer and paired with your smartphone, as shown in the images below.



LOYALTY-SECU Technology Co., LTD





For more information on printing to a WiFi printer or network printer, please refer to the PrinterShare Online Support at **http://www.printershare.com/help-mobile.sdf**.

8 Configure WiFi Printing on an Android OS ?

Note: WiFi printing is only supported on Android operating systems.

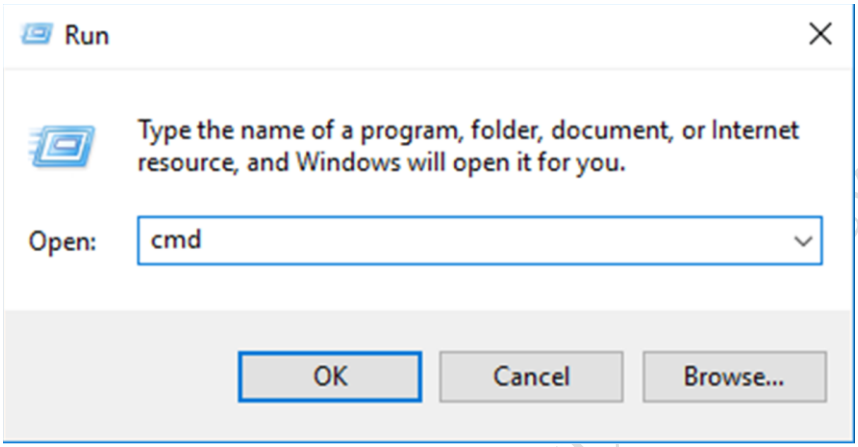
For more information about WiFi printing on Android OS, please refer to PrinterShare Online Support: **http://www.printershare.com/help-mobile.sdf**

Remarks: The "PrinterShare" app only supports adding a single port for mobile printing. For 3 USB ports print server, it is recommended to use the **"PrintHand"** app.

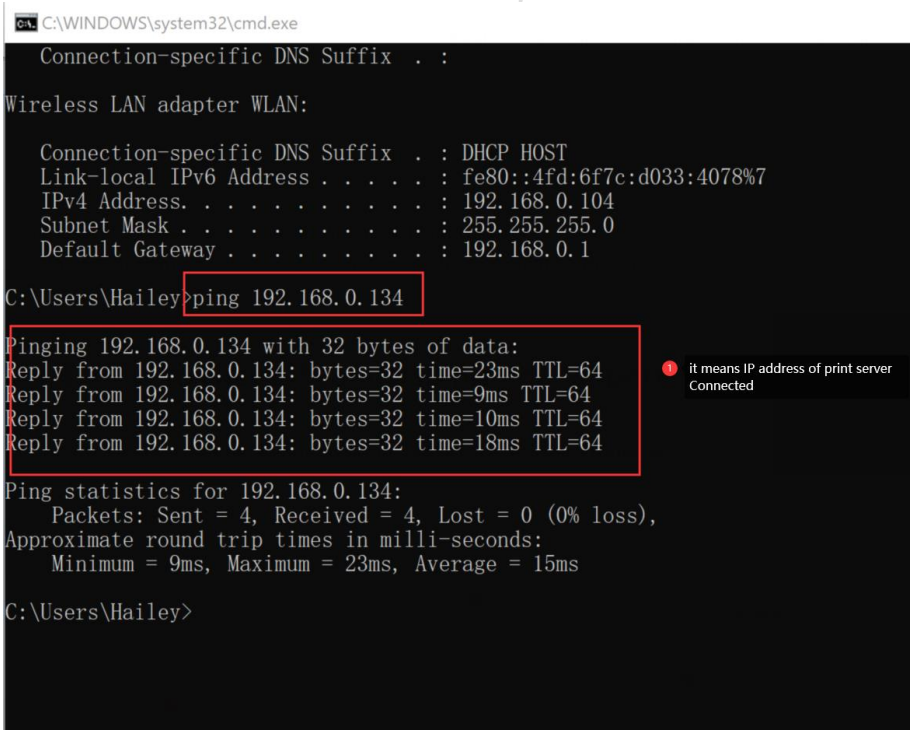
9. FAQs

9.1 Check if the Print Server has successfully connected to the Ethernet network or not?

Steps: Click on the "Start" menu, then type "Run" in the search box or use the WIN+R key combination to open the Run window. In the Run window, enter "**cmd**" and click "**OK**".

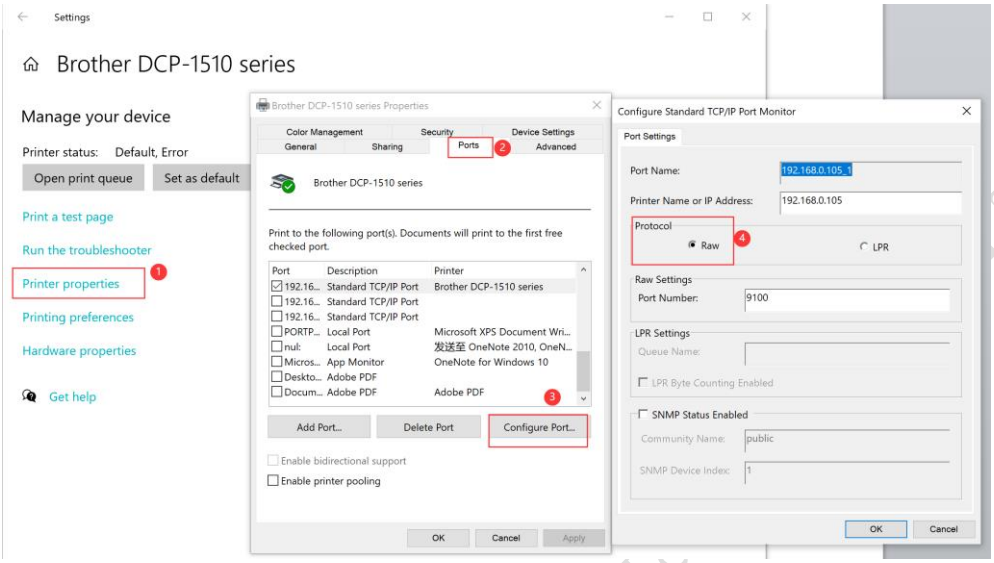


Input "PING xxx.xxx.xxx.xxx" (print server's IP address) into the command prompt.
Please note that there must be a space between "PING" and the IP address.



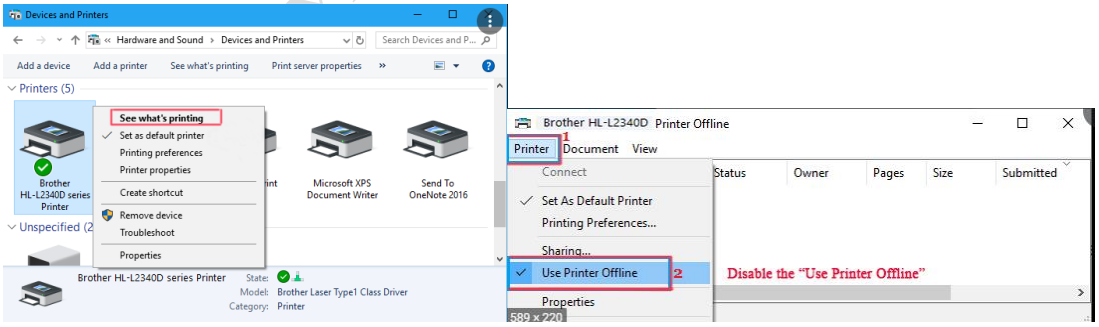
9.2 To check if your USB printer supports the RAW protocol or not?

Confirm the printer's default data format as "RAW" by accessing the "Printer Properties" settings.

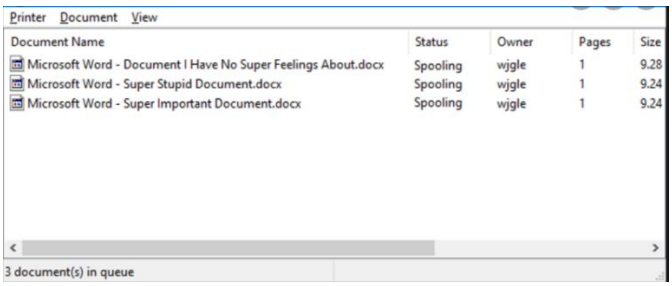


9.3 To confirm if there is a print issue with a document pending?

Right-click on the target printer, choose "**See what's printing**", click on the "**Printer**" menu, and check whether the "**Use Printer Offline**" option is disabled, as shown below:



Note: If there are any documents in the queue, please delete all of them.

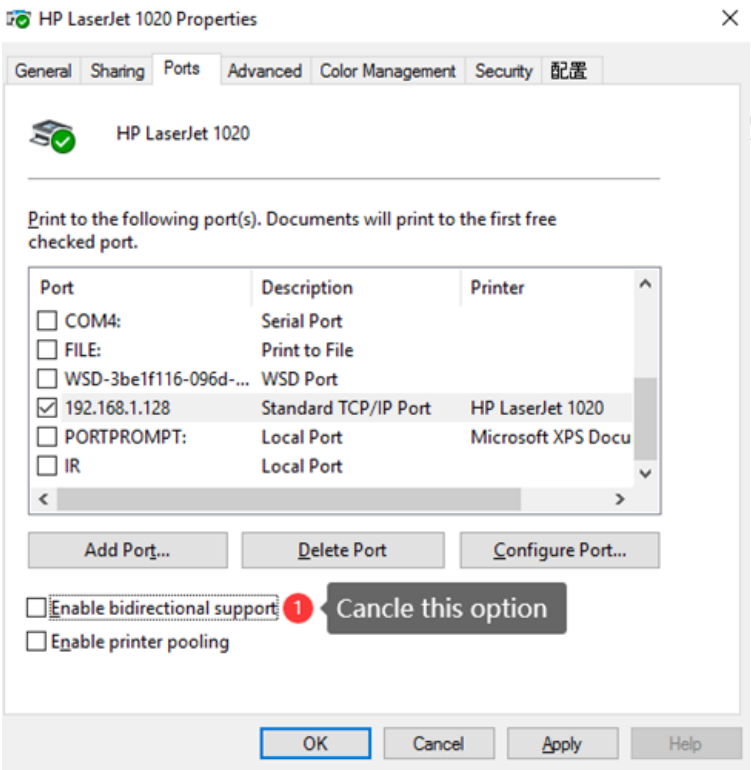


9.4 Why it is not recommended to use DHCP to obtain an IP address for the LAN print server?

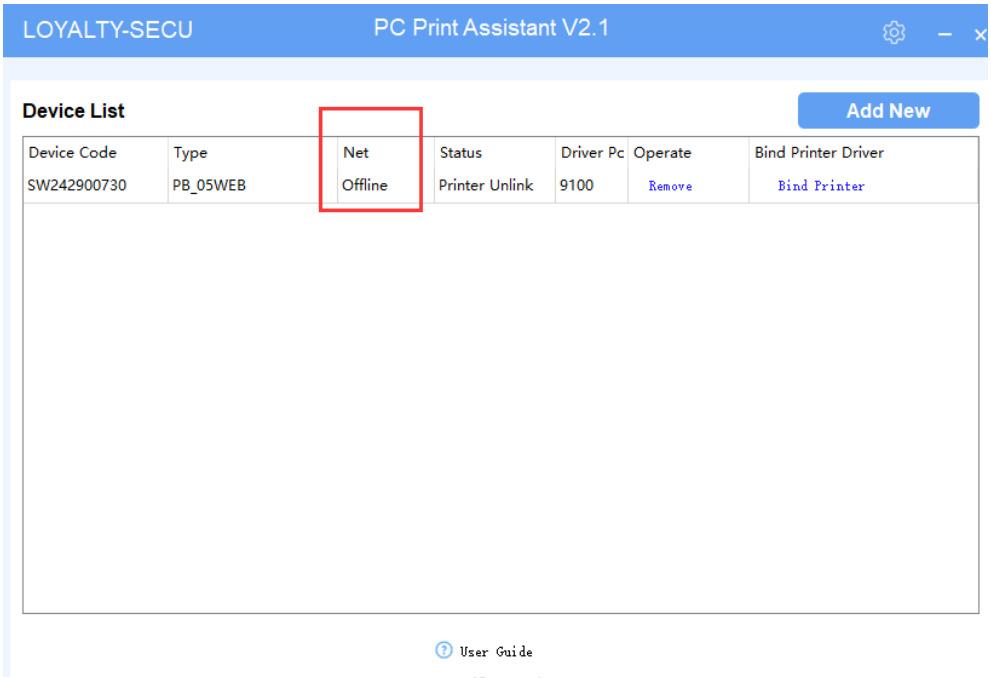
It is easy to forget the IP address and accidentally assign a different IP address to the print server when using DHCP to obtain an IP address.

9.5 To check if the "Enable bidirectional support" option is disabled or not.

As shown as below:



9.6 Why Cloud Printer “Net” Status Shows “Offline” in the PC Print assistant



Steps:

1.Confirm whether the print server is connected to the network. Please refer to **Part 9.1**

2.Confirm whether the Wi-Fi password was entered correctly. Please make a double check via “Print Assistant” APP, please refer to **Part 4** (Print Assistant APP Setting).

3. Check whether the print server is set to a static IP, but that the static IP address is not in the same network Segment as the currently connected router, which causes the print server to fail to connect to the network properly.

Shenzhen LOYALTY-SECU