KCodes Series Print Server

User's Manual

Using the Print Server

Introduction

The goal of this produce is to provide the print server in a single product. We developed new technology called "NetUSB" and "AirPrint" to achieve this goal. Basically, the "NetUSB" is a "USB over IP" technology that transparently redirects all USB packets to TCP/IP network channel. "NetUSB" allows you to use print devices as if they were connected directly to your PC although they are actually remotely connected to the USB device server. And "AirPrint" is a technology that allow you to print photos or documents on your iPhone or iPad without any cable.
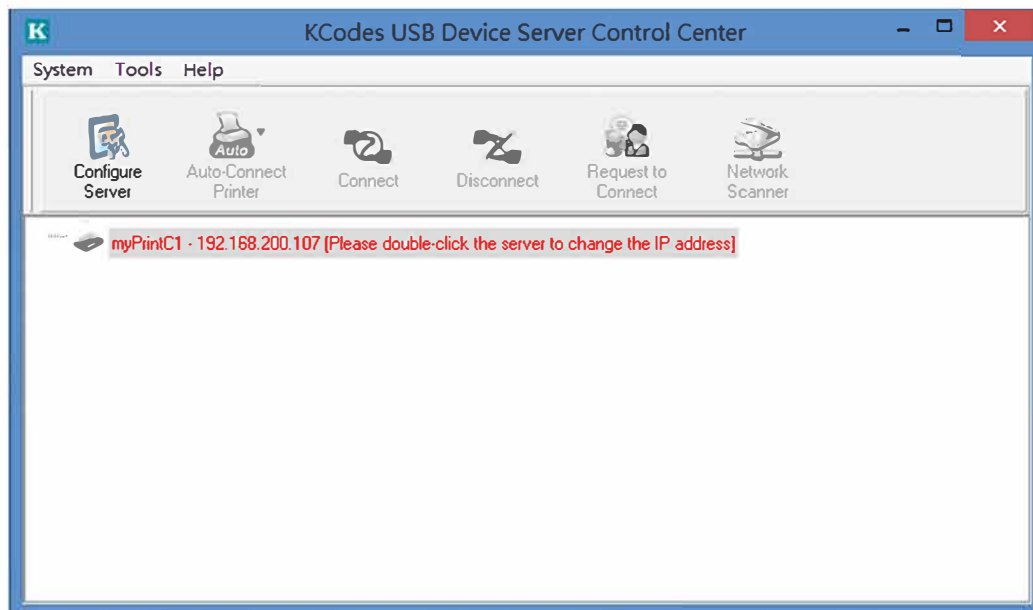
NetUSB funtion

Connect & Disconnect

"NetUSB" allows you to use USB devices as if they were connected directly to your PC although they are actually remotely connected to the 611/612AC print server. The "connect" operation is a software operation that simulates an actual USB device plug-in. That is to say, when you do a "connect" operation in the Control Center, PC can then detect a print device's plug-in, although actually you do not plug in any USB device. Similarly, the "disconnect" operation is a software operation that simulates the disconnection of the USB device. Once the connect operation is successful, the operations to use that USB device are just the same as if the USB device is directly connected to the PC.
If a USB device is "connected" by a PC, we say that PC has the ownership of the print device. Only one PC can get the ownership of a USB device at the same time. Therefore, if a USB device is connected by one PC, no other PC can connect this USB device until this USB device is disconnected.
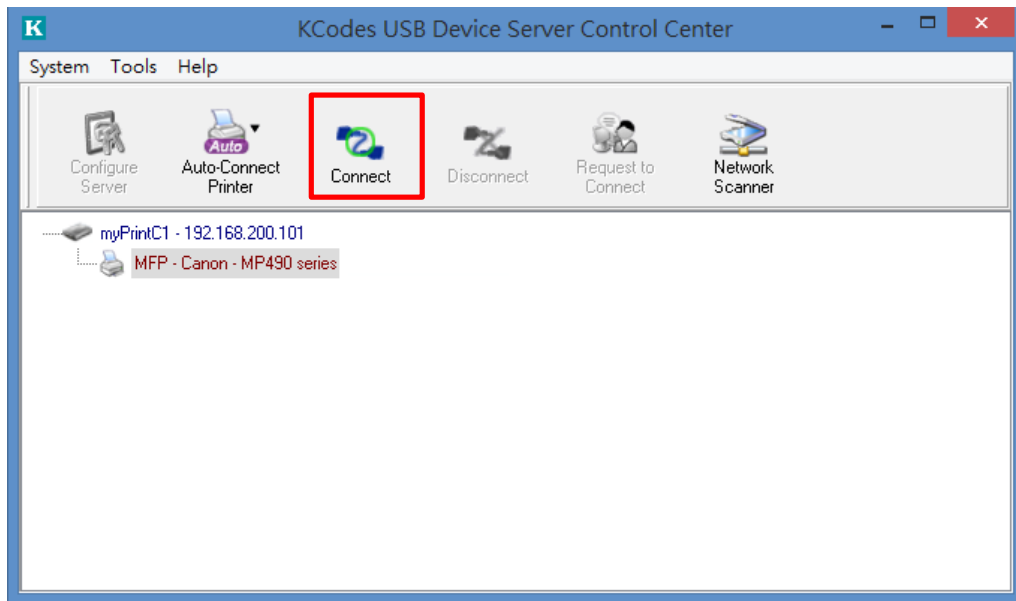
Subnet Issue

Before using the NetUSB technology, you must first make sure that your PC can access USB device server via TCP/IP. The simplest way to do this is using "Control Center" to search for the USB device server on the network and change its IP address to be the same subnet as your PC. If the server and your PC are not in the same TCP/IP subnet, Control Center will show the server in red, as the following figure. You must change the IP address (or using DHCP) of the server so that the server and your PC are in the same subnet. Control Center will show these servers in blue, meaning you can access these servers by the NetUSB technology.

Installation of USB Device Driver

Some USB devices, like printers or MFPs (multifunction printers), require to install vendor-supplied driver (usually on CDROM). For those USB devices that do not need to install driver, please skip this section.

1. Insert the CDROM into the CD drive and run the "autorun" program.
2. Follow the instructions of the installation program to install driver.
3. When the installation program asks you to plug-in the USB device, run the "Control Center".
4. In the Control Center, click the USB device server that has the desired USB device attached.
5. Click the desired USB device as the following figure.

6. Click the "Connect" button. Then the message "Manually Connect by your_computer_name" will be shown, as the following figure.

7. Now, the installation program will detect the USB device and continue to install driver.
8. After the installation is completed, click the USB device in the Control Center and then click the "Disconnect" button to disconnect the USB device.

Now the driver of your USB device is installed.

Using the USB Device Server

9. In the Control Center, click the USB device server that has the desired USB device attached.
10. Click the desired USB device.

11. Click the "Connect" button. Then the message "Manually Connect by your_computer_name" will be shown.

12. Now, PC will detect the plug-in of the USB device. The "connect" operation is a software operation that simulates an actual USB device plug-in. That is to say, when you do a "connect" operation in the Control Center, PC can then detect a USB device's plug-in, although actually you do not plug in any USB device.

13. Then, just use the USB device as if it is connected directly to your PC's USB port.

14. After you finish using the USB device, click the USB device in the Control Center and then click the "Disconnect" button to disconnect the USB device. Other PCs can not "Connect" the USB device until you "Disconnect" that USB device. That is to say, only one PC is allowed to connect the USB device at the same time.
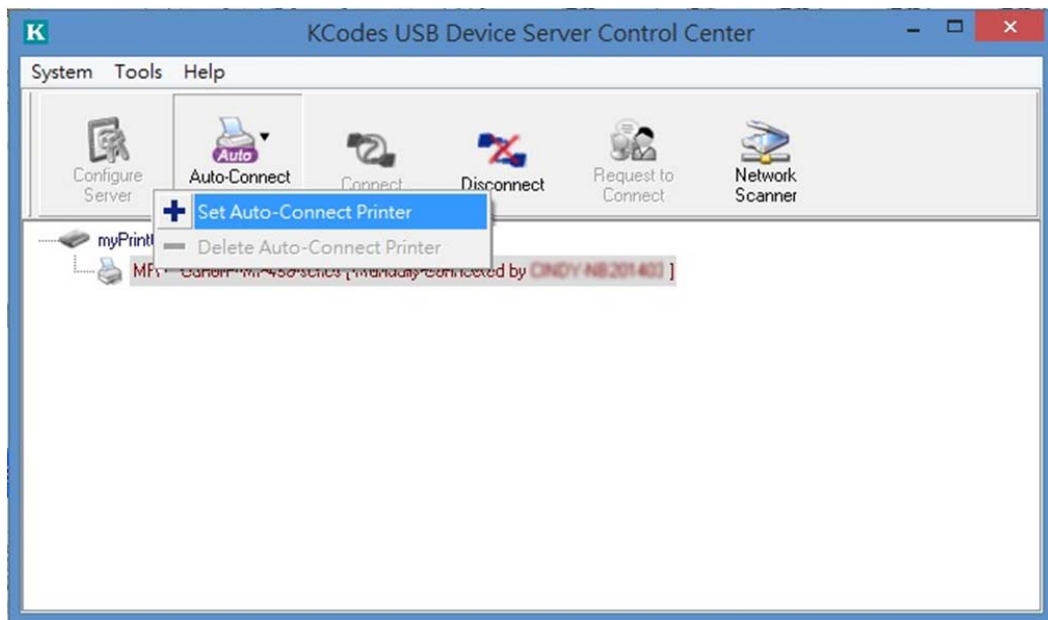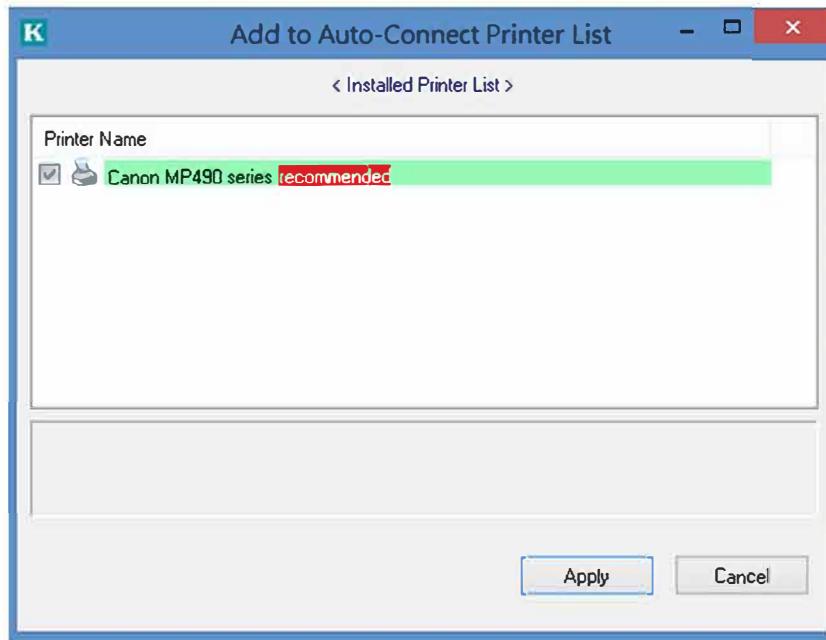
Auto-Connect Printer

The method described in section 4.2.4 is so-called manual-connect, which means users must manually connect the USB device before using that device, and must manually disconnect the USB device after using the device, otherwise nobody else can connect this device. However, for printers and scanners (and MFPs), the USB device server supports auto-connect so users don't need to manually connect/disconnect. This and the next sections show you how to do this.

After the driver is installed as described in section 4.2.3, you can see a newly created printer in the Control Panel's "Printers and Faxes". Follow the steps below to do a NetUSB auto-connect printing.

15. In the Control Center, click the USB device server that has the desired printer (or MFP) attached.
16. Click the desired printer (or MFP).
17. Click the "Auto Connect Printer" button and choose "Set Auto-Connect Printer".
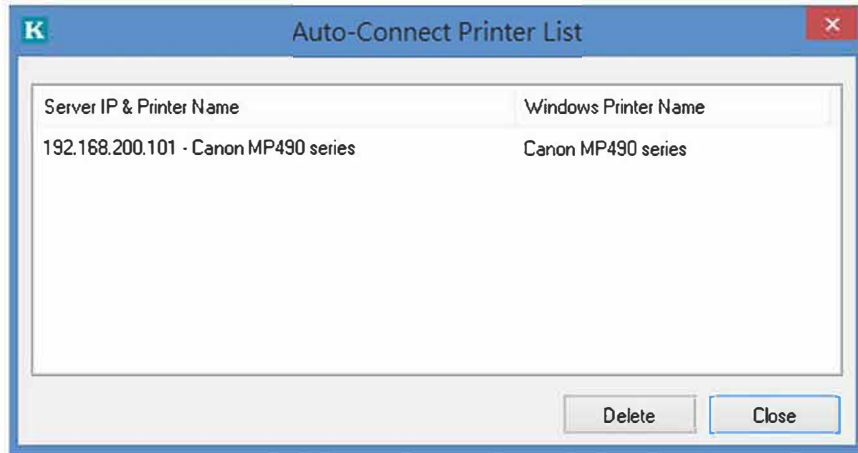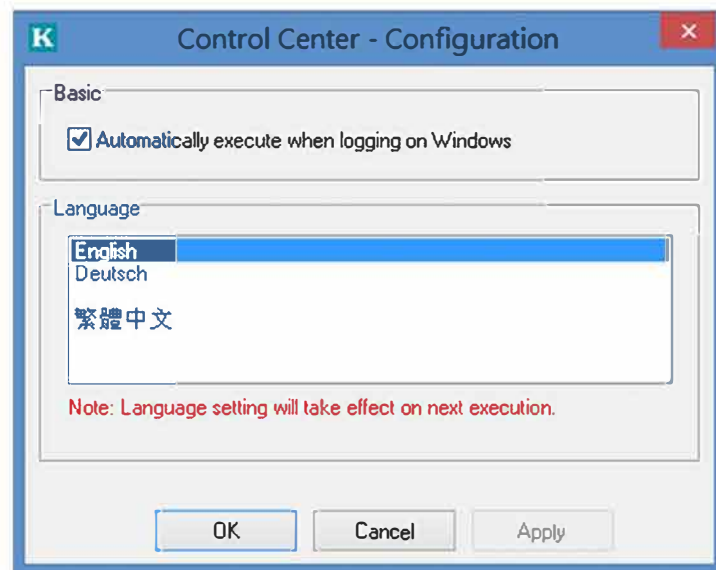

The following figure will appear.

18. Choose the desired printer. The desired printer must be the Windows printer (this is a logical printer) that matches the printer attached on the USB device server (this is a physical printer). Then click the "Apply" button.

19. Then, the printer will be marked as an "Auto-Connected Printer" in red. If you choose "Auto-Connected Printer List" in the "Tools" menu, you can see a newly created item that describes the association between the Windows printer and the physical printer on the server.

20. Then try to issue a print job to the desired printer. You will see the Control Center will automatically do a connect operation. Then, the print job will be issued to that printer.

21. Even you already properly setup an auto-connected printer, the Control Center must be running (in the background) while a print job is issued. This means you'd better run the Control Center every time after you login Windows. In order to skip this manual operation, you can make the Control Center be run automatically after you login Windows. To do this, choose the "Configuration" item in the "Tools" menu. The following window will appear. Click on the check box and then on the "OK" button. This feature is enabled by default.

If you would like to break the association between the Windows printer and the physical printer, just click on the association and click the "Delete" button in the "Auto-Connected Printer List".

Request to Connect

If a USB device is manually connected by any other user, basically you can not connect that device. However, we offer another mechanism called "Request to Connect" to solve this inconvenience. For example, there are two computers – TESTES and TEST. Now the owner of "HP Photosmart 2600" is TEST. Then, the TESTES computer wants to use this HP printer. The user on the TESTES computer can click the "Request to Connect" button in the Control Center. The following window appears.

At this moment, the user on the TEST computer will see the following window, indicating that another computer – TESTES is requesting to use the HP printer.

The user will choose to accept or reject. If accepted, the Control Center on TEST will automatically disconnect the device and the Control Center on TESTES will automatically connect that device.

Quitting the Control Center

The Control Center doesn't really quit if you click the "X" box (close box) at the top right corner of the window. Instead, it just minimizes itself to the system tray. There are two ways to really close the Control Center. The first way is choosing "Exit" item in the "File" menu in the Control Center. The second way is right-clicking the icon of the Control Center in the system tray and choosing the "Exit" item

Limitations

There are some limitations to use the NetUSB technology.

1. Only supports Windows XP to Windows 10. Windows 98/ME is not supported.
2. Supports Mac OS X 10.7 Lion ,Mac OS X 10.10 Yosemite, Mac OS X 10.11 El Capitan, Mac OS 10.12 Sierra, Mac OS 10.13 High Sierra
3. Only one PC can get the ownership of the same USB device at the same time.