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FCC Warning
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to subpart J of Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which the user will be required to correct the interference at their own expense.

All contents are subject to change without prior notice.

1. Introduction

Product Overview

The external MFP servers enhance capability by letting you place your MFP printers at convenient locations directly on the Ethernet network, and by increasing network MFP printer performance and management.

Network Management

The MFP servers support the WEB management, which remote management and a warning. A standard WEB server is permanent on these MFP servers. Any standard WEB browser can be used to access and manage these MFP servers.

Components and Features

1-USB Port MFP Server

- 1 USB2.0 port (High-speed)
- Fast Ethernet network port: RJ-45 for 10Base-T or 100Base-TX
- 1 LED to indicate Status, 2 LED's to indicate 10/100M link lights, 1 LED to indicate USB 1.1 or 2.0 link
- One Setup CD for Windows 2000/XP, User's Guide
- One external AC power adapter
- One Quick Installation Guide
- Built-in Reset Button

Before you start, you should prepare:

- One Windows 2000/XP computer with CD-ROM drive
- One MFP Printer with USB port

Hardware Installation

To install the MFP server(s), you need to complete these steps:

- Confirm that your MFP printer works well.
- Connect the MFP server to the network and MFP printer(s) and plug in the MFP server.

Follow these instructions to install the MFP server(s), please refer to any peripheral you are connecting to the MFP server:

1. Connect one end of the UTP cable to the Ethernet port on MFP Server and the other end to a wall jack or HUB.
2. Connect the power adapter.
3. Connect the USB cable to the USB port on the side of MFP Server and the other end to your MFP printer.

2. MFP Server Installation

Preparation

To meet users' network printing/scan needs in today's heterogeneous and multiple protocol networking environments, the MFP server supports industrial standard protocols: TCP/IP.

Supported Networks

MFP server supports the TCP/IP network protocol. In addition, we provide a setup utility for network configuration on the following networks:

- Microsoft Windows 2000/XP

Configuration Solution Table

Setup Operating System	Function	Remarks
Setup utility		
Windows 2000/XP	Install a single network on a peer-to-peer network	Easy MFP server installation runs from setup CD

3. The Setup Utility for Windows 2000/XP

The setup utility is a proprietary Windows-based management program that can assist you in configuring and managing your MFP server in Windows 2000/XP environments. The program can be installed from the setup CD of MFP server.

Installing the setup utility and driver:

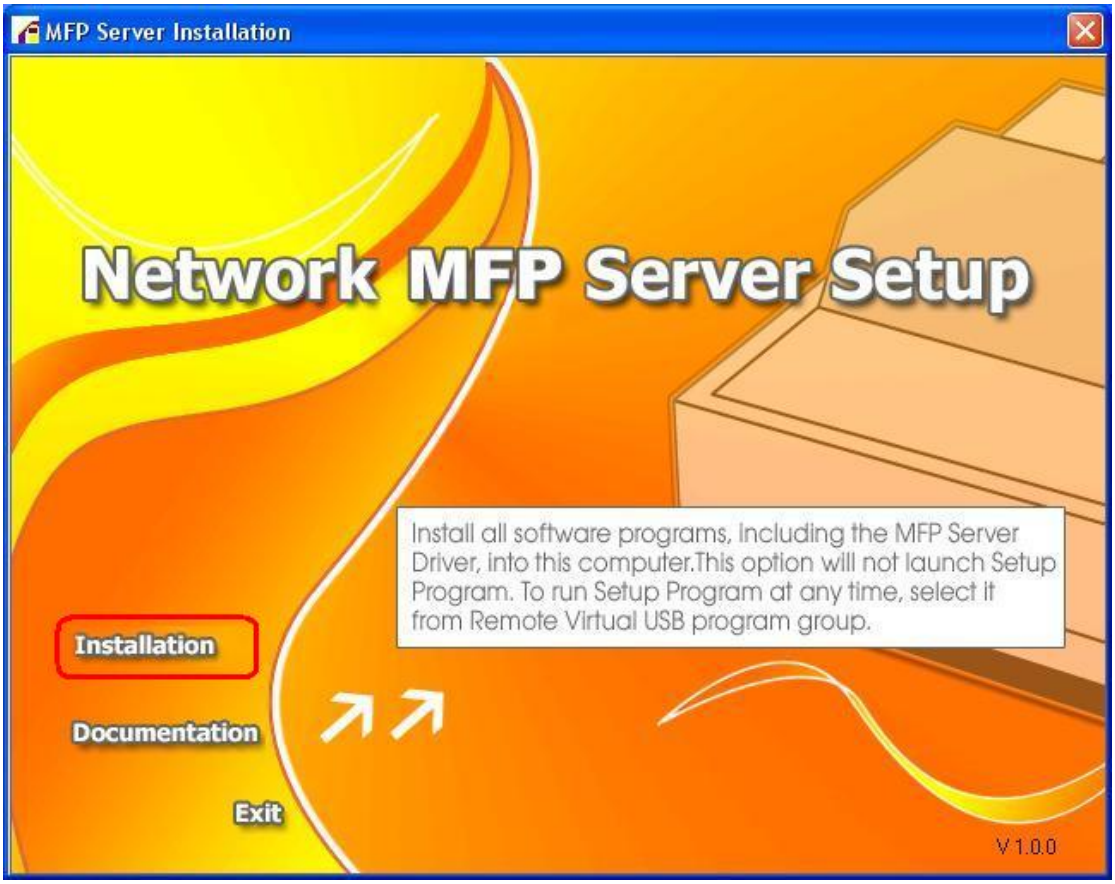
Hardware Installation:

1. Connect one end of the UTP cable to the Ethernet port on MFP Server and the other end to a wall jack or HUB.
2. Connect the power adapter.
3. Connect the USB cable to the USB port on the side of MFP Server and the other end to your MFP device.

Note:
You can install the MFP printer's driver and utility into your computer in advance.
Or, you can install the MFP server's driver and utility first, and then install the MFP printer's driver and utility by the notice of Windows pop-up message (recommended).

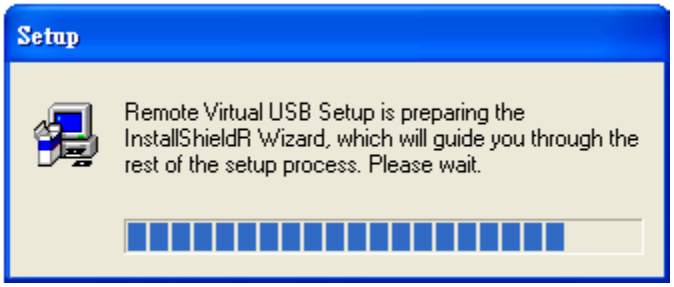
Software Installation:

1. Insert the MFP server setup CD. If the start-up screen does not appear, double-click **My Computer**, double-click the **CD-ROM** icon, and then double-click **autorun.exe**.
2. Choose **Installation** to install all software programs.

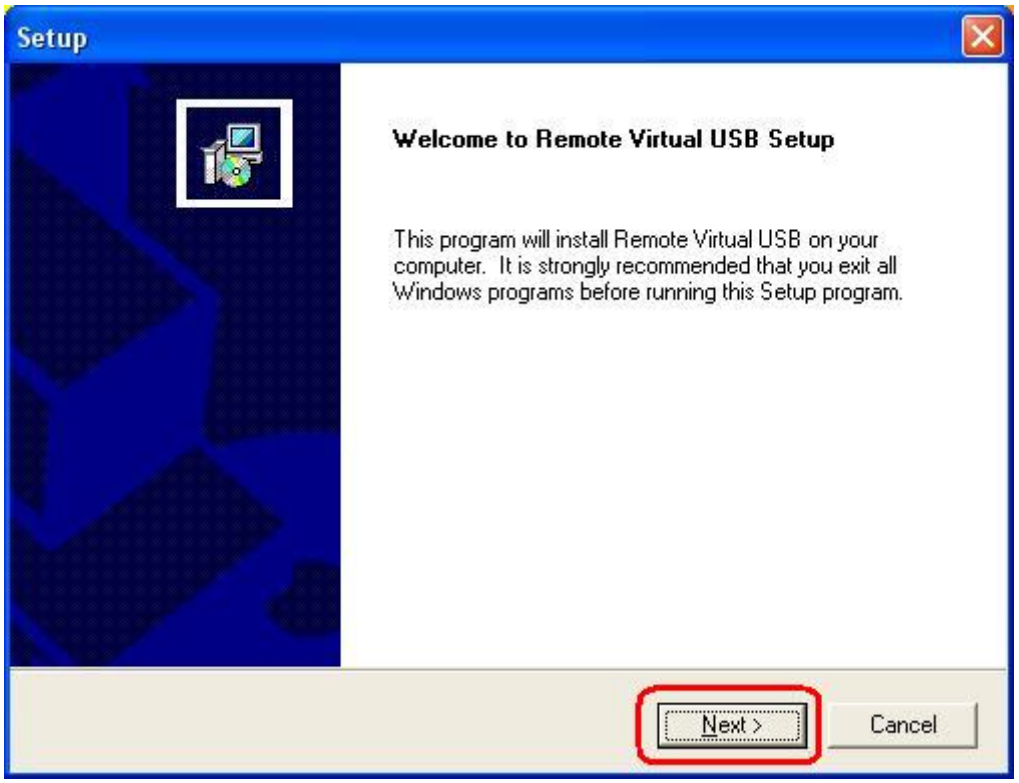


3. Click **OK**.

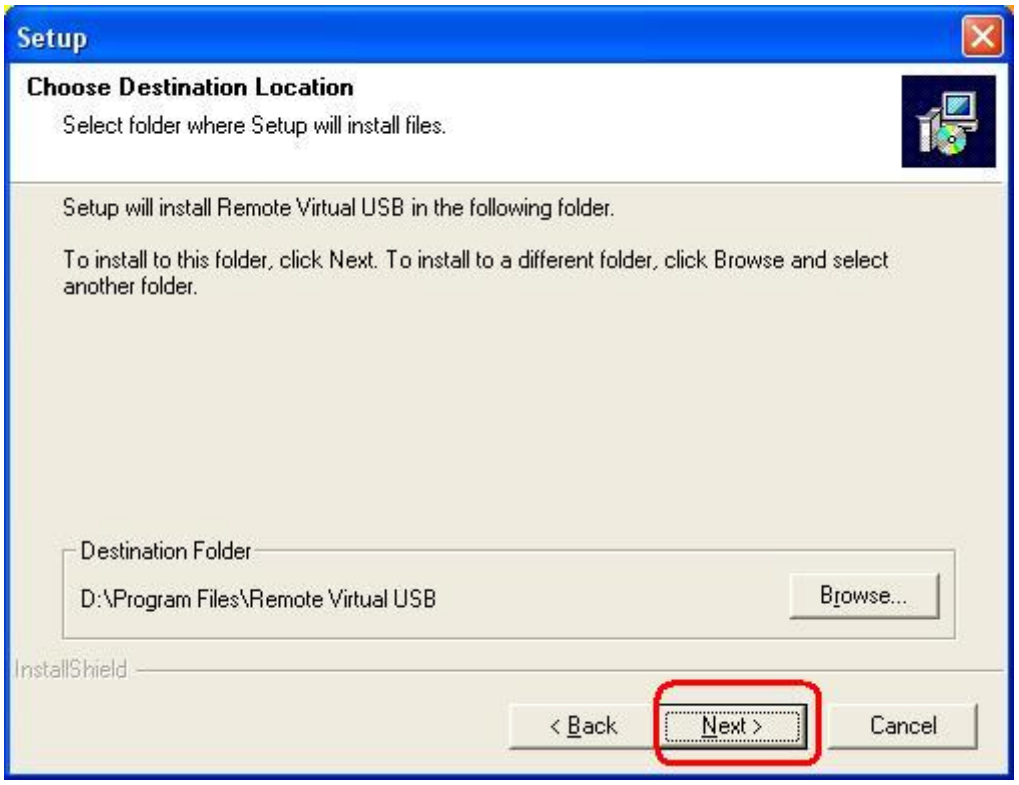
4. Windows show message box..



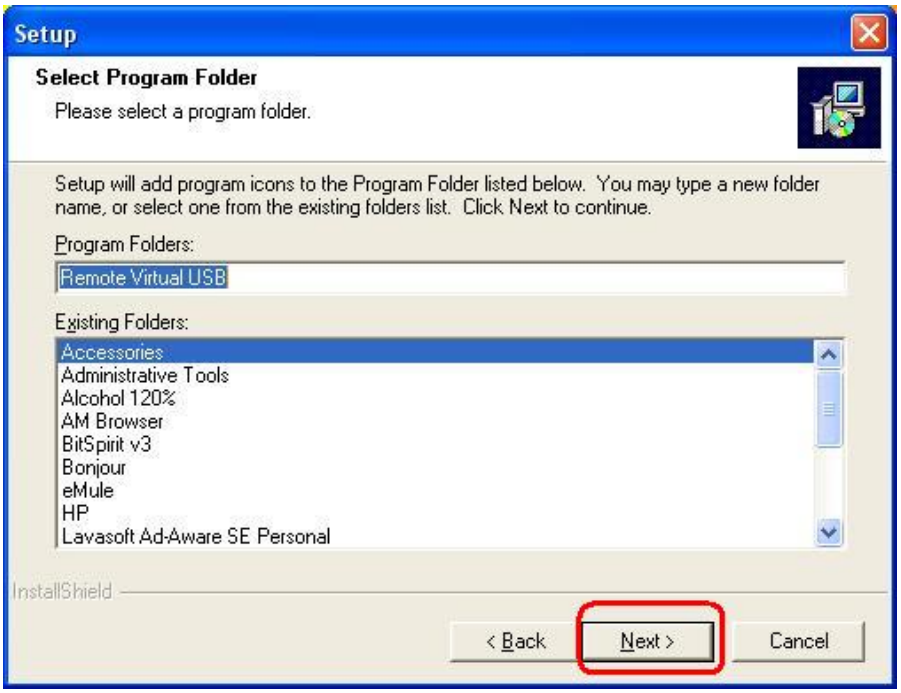
5. Click **Next**



6. Click **Next**.

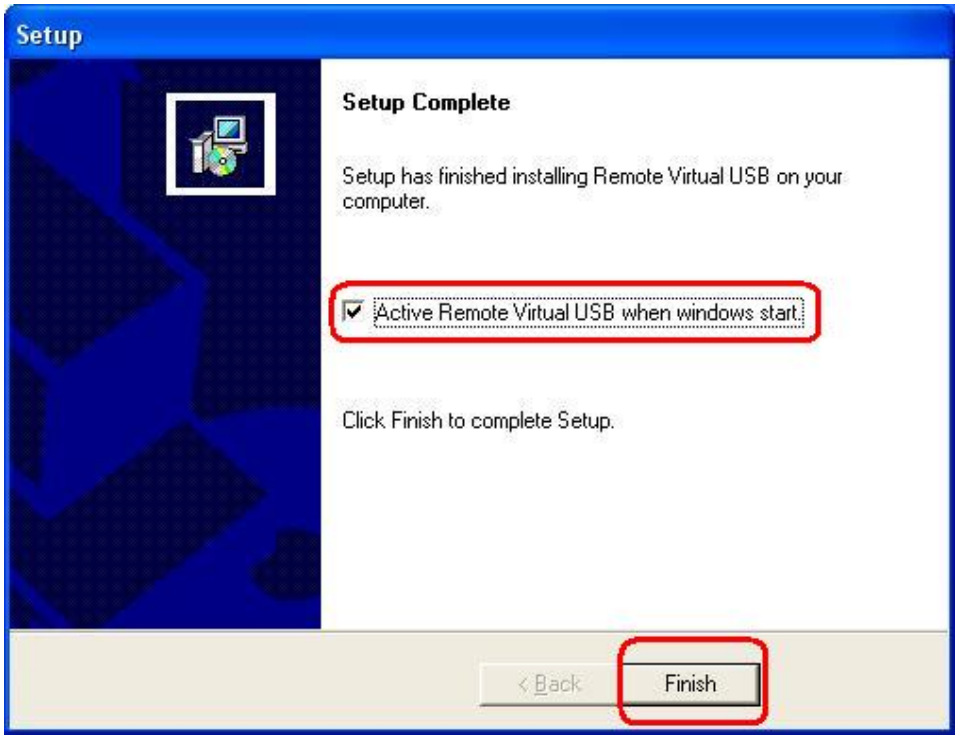


7. Click **Next**.



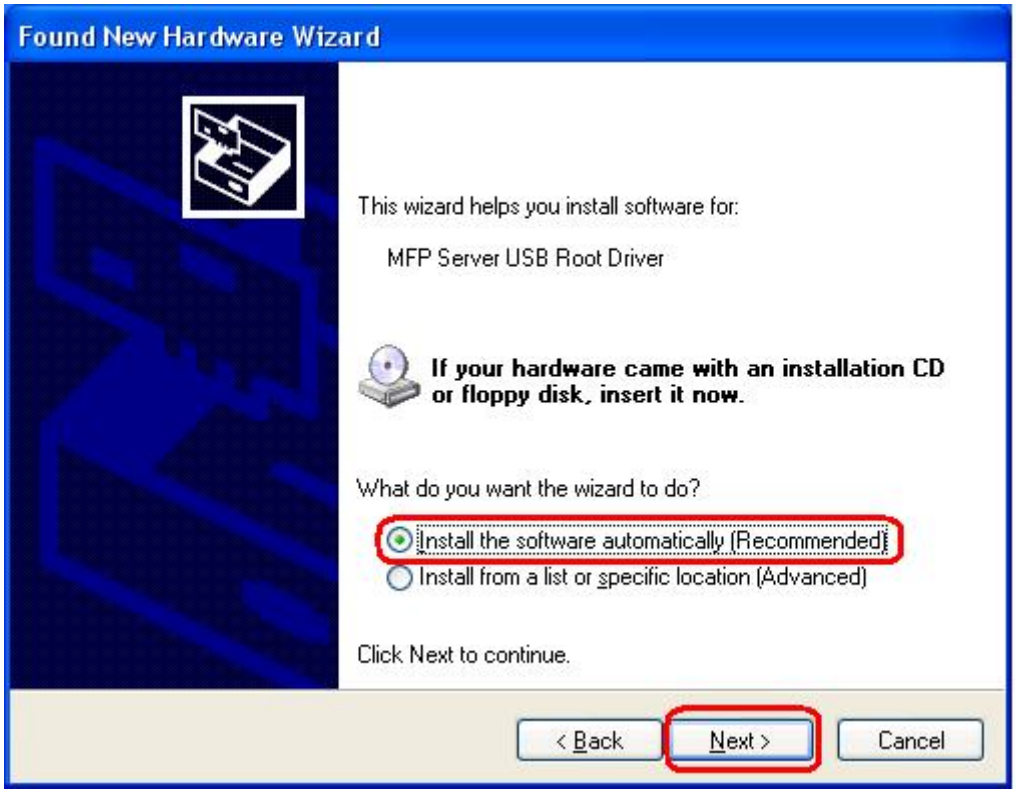
8. Click **OK**.

9. If you would like the MFP server software to run automatically when starting your computer (recommended), leave this box checked and click **Finish**.



10. Select **No, not this time**, and then click **Next**.

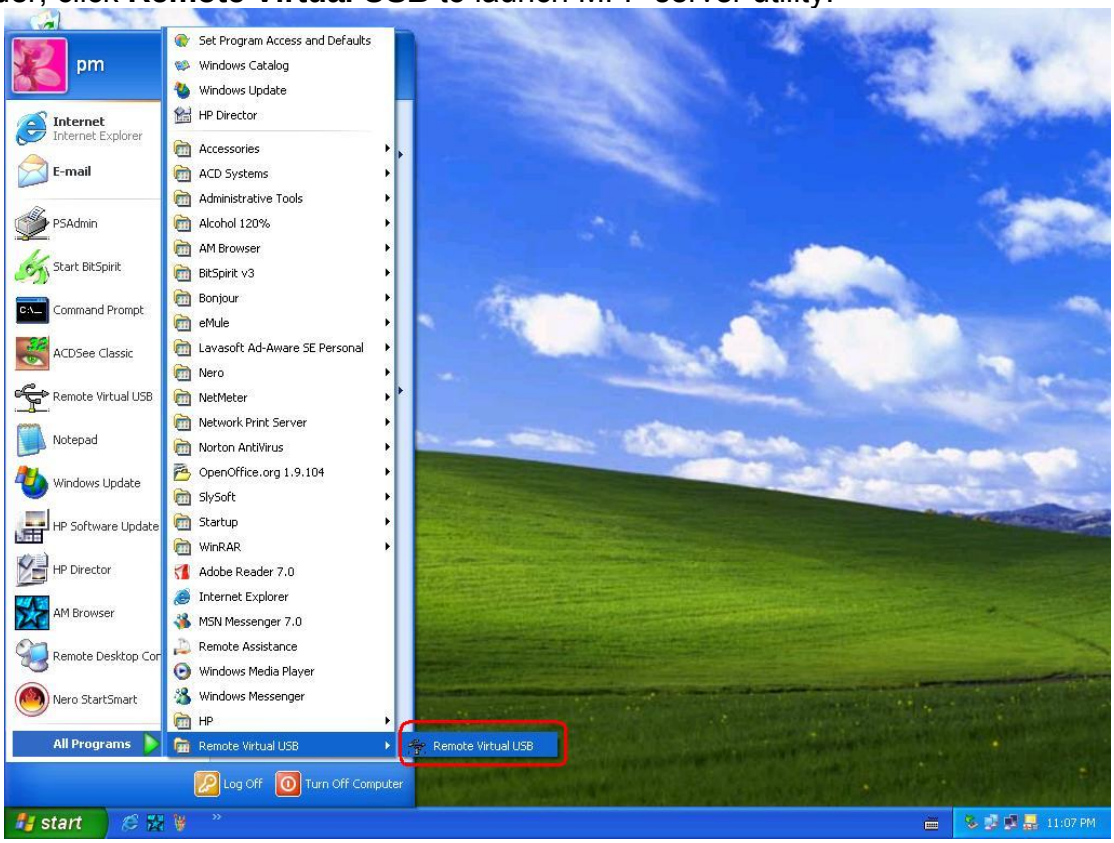
11. Select **Install the software automatically (Recommended)**, and then click **Next**.



12. Click **Continue Anyway**.

13. Click **Finish** to complete the software installation.

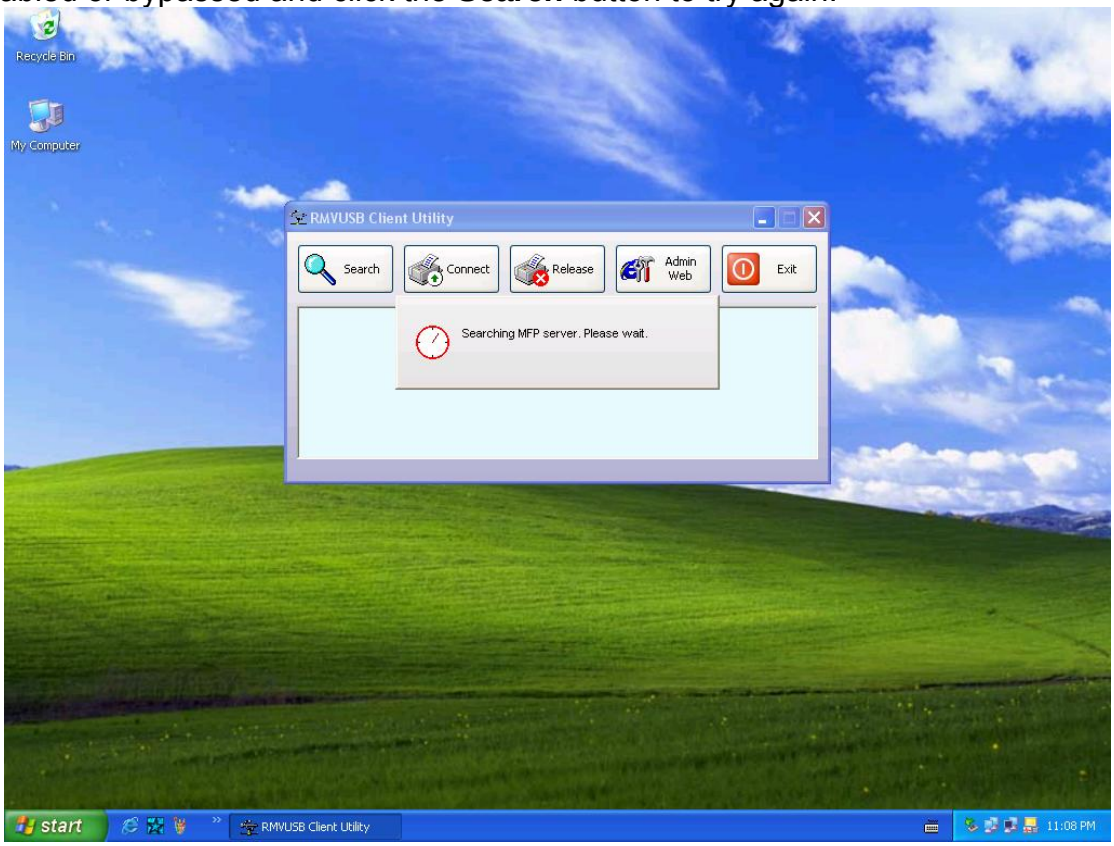
14. Then, start to setup MFP server. Click **start** -> **All Programs** -> **Remote Virtual USB** folder; click **Remote Virtual USB** to launch MFP server utility.



15. If you have Windows XP and the Windows Firewall is enabled you will see this window pop-up message when the MFP server utility is first launched. Make sure you click the

unblock button to allow communication with the MFP server. Other software firewalls may display similar options – make sure the MFP server software is allowed to bypass such programs.

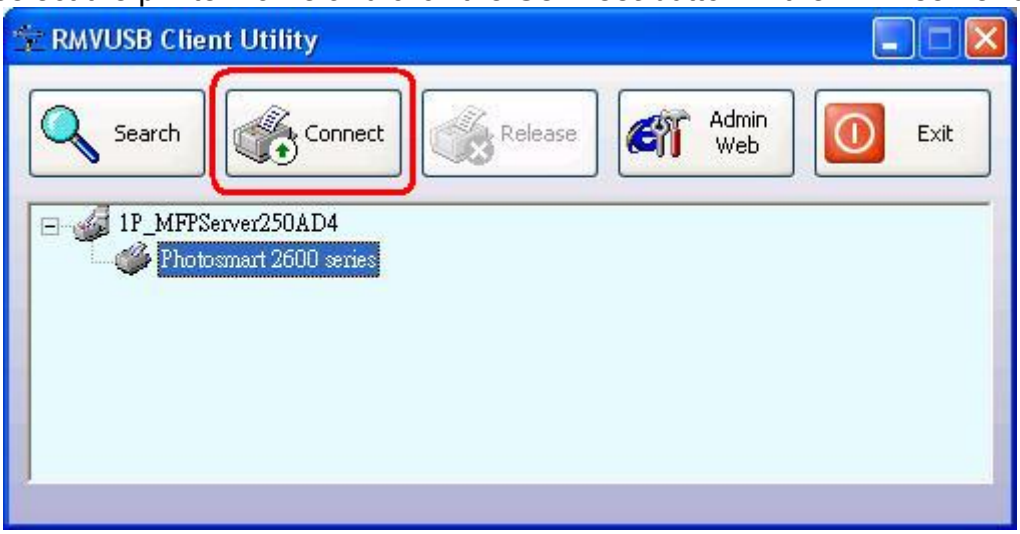
16. The MFP server utility will search your network for the MFP server and display it in the window. If no MFP server is found, please make sure any third party firewalls have been disabled or bypassed and click the **Search** button to try again.



Note:

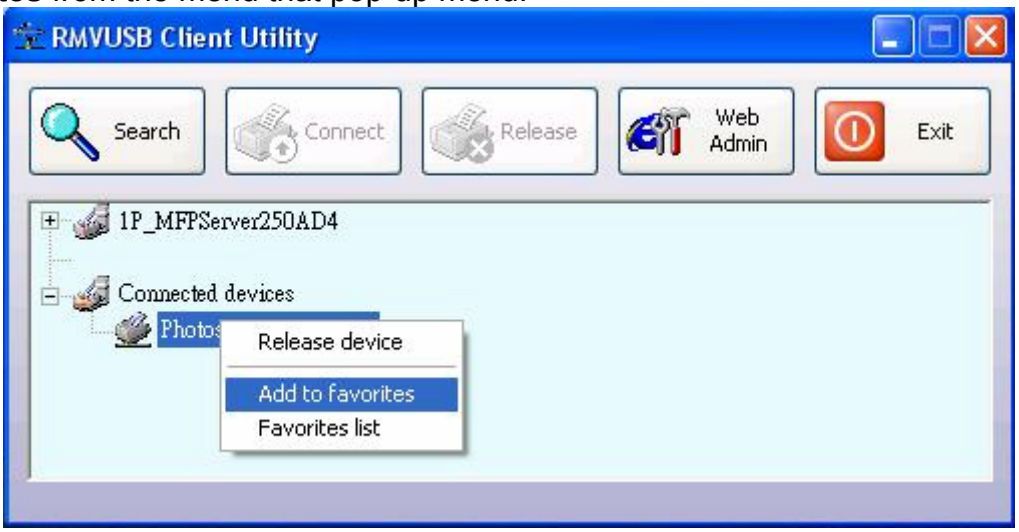
The default IP address of MFP server is 192.168.0.10, and subnet mask is 255.255.255.0. If the MFP server utility didn't find MFP server, please make sure of the MFP server and your computer's IP segment are the same, e.g. 192.168.0.xxx.

17. Click the "+" in front of the MFP server name to show the name of the attached printer. Then select the printer name and click the **Connect** button in the MFP server utility.



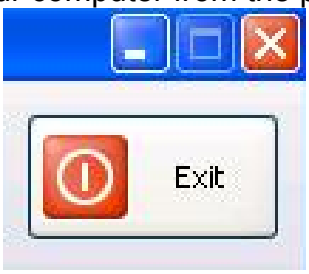
18. The printer should be detected as if it was plugged directly into the computer. Finish any remaining setup needed by the printer software. Your MFP printer should be ready to use.

19. If you would like the connection to this printer to be restored automatically when the MFP server utility launches, you will need to add the device to your favorites list. Click the "+" in front of **Connected devices** and right-click the name of the printer. Choose **Add to favorites** from the menu that pop-up menu.

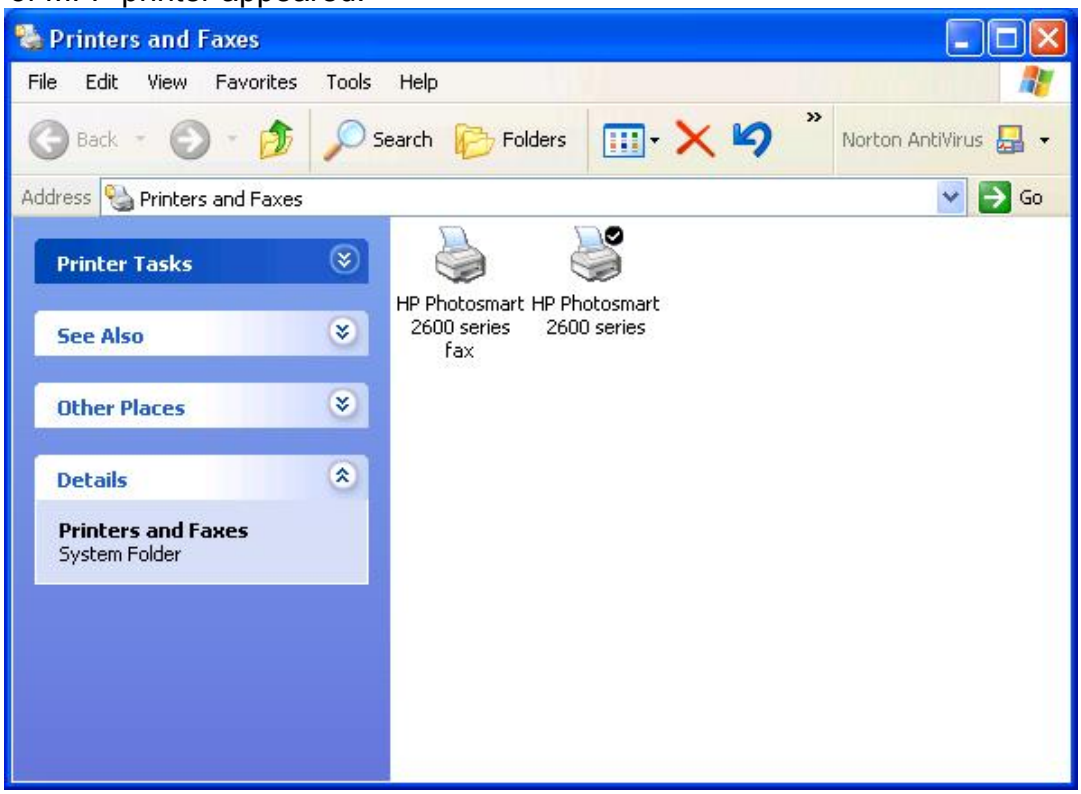


20. Click **OK** to confirm that the printer is in your favorites list.

21. Once you have connected to the MFP server you can close the MFP server utility. Be sure to use the close box with an **X** in the top right corner so that the MFP server utility continues to run in the background. The large button labeled **Exit** will shut down the MFP server utility and disconnect your computer from the printer.



22. From Windows 2000/XP system, go to **start** -> **Printers and Faxes** and make sure of the icon of MFP printer appeared.



23. Congratulation! Your MFP printer is now ready to share.

Note:

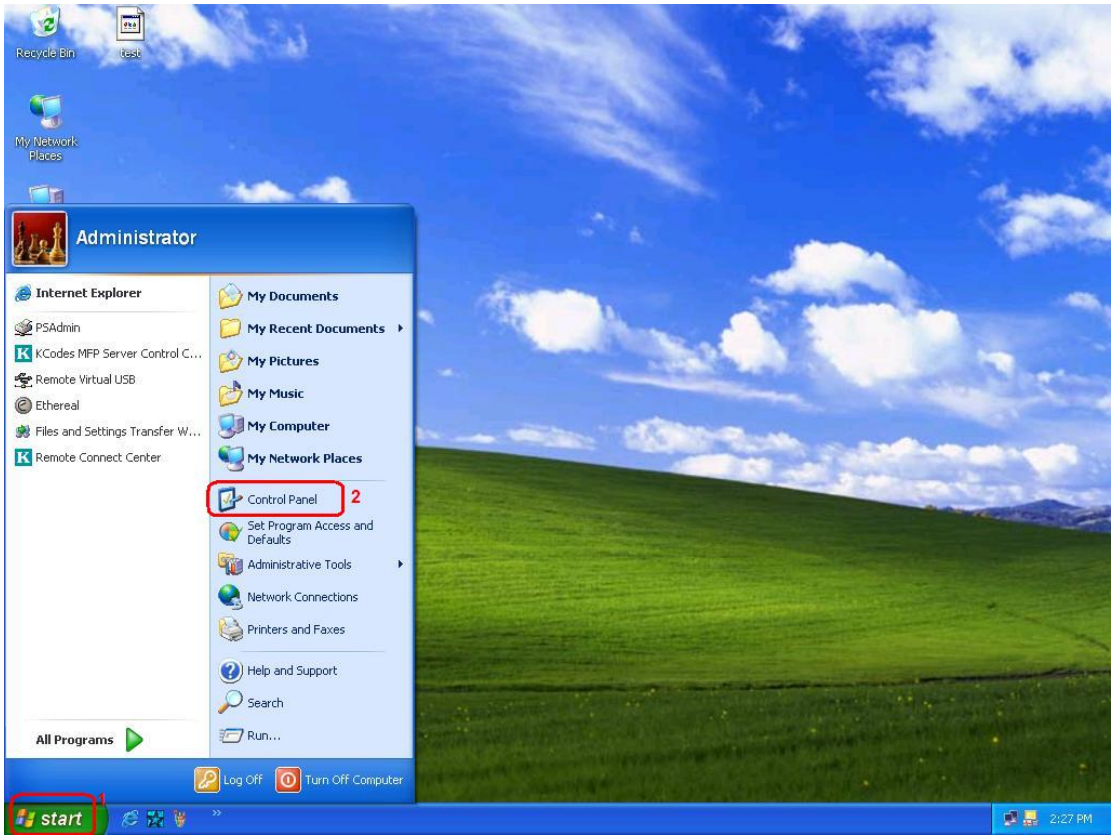
If you wish to setup more MFP servers, start setup utility from your Windows Start menu: **start** -> **All Programs** -> **Remote Virtual USB** -> **Remote Virtual USB** and repeat the setup procedure.

Uninstalling the setup utility on Windows 2000/XP Computer

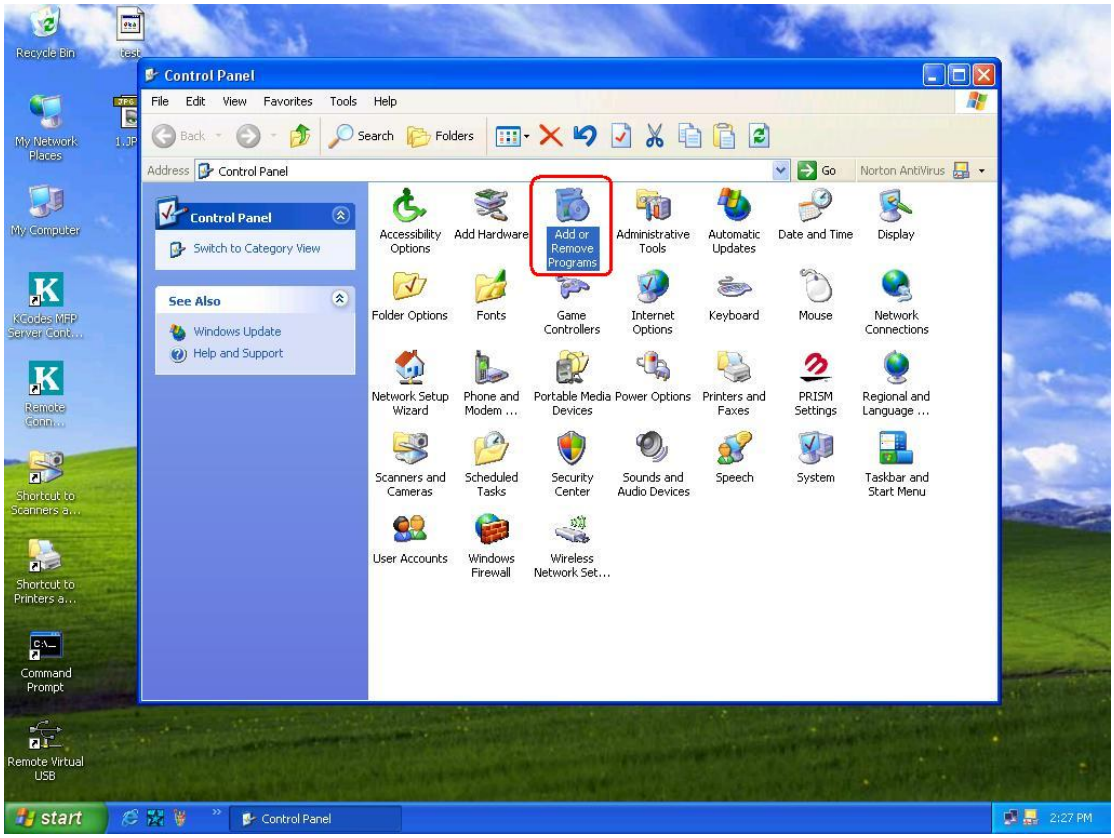
Please follow the directions listed below to proceed with the un-installation procedure. After the MFP server setup utility is removed, the MFP server is no longer accessible. You have to re-install it on your system in order to access the MFP server again.

Procedure:

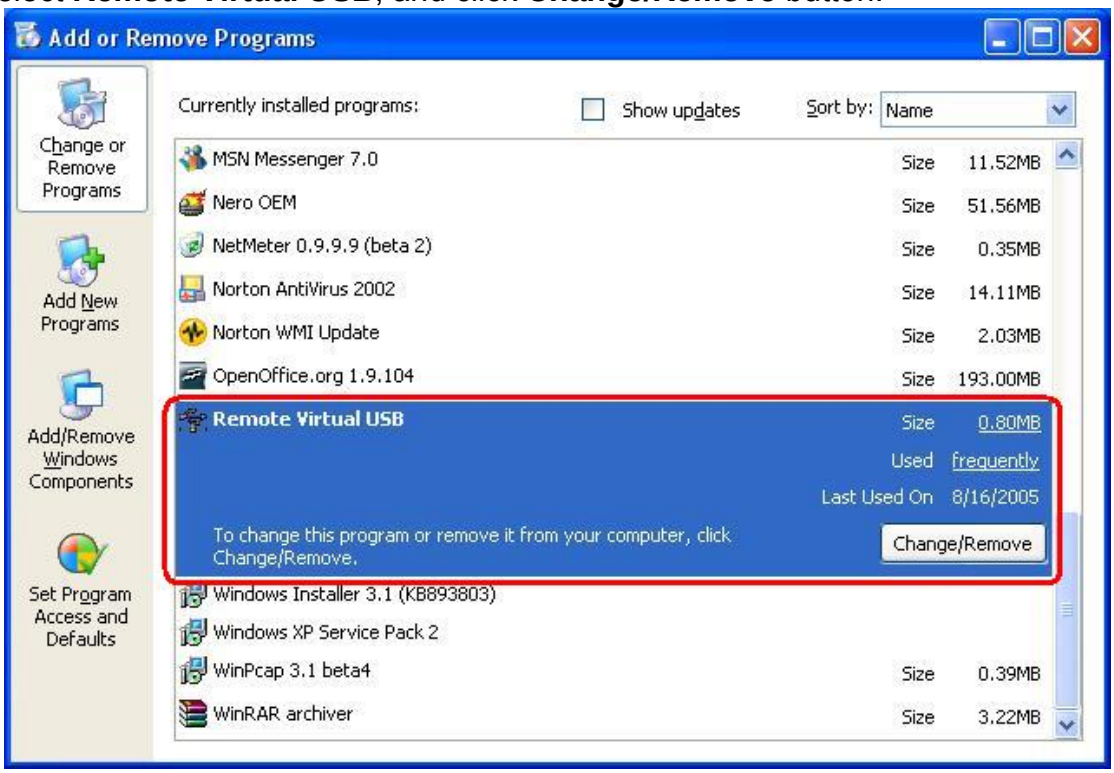
1. Click **start**, and select **Control Panel**.



2. Double click the **Add or Remove Programs** icon.



3. Select **Remote Virtual USB**, and click **Change/Remove** button.



4. The un-installation wizard program will be launched.
5. Follow the directions on the screen to complete the un-installation procedure.

4. Configuration from Embedded Web Server

Overview

The MFP server contains an embedded web server that can be accessed through a supported web browser on a LAN, for example, IE 5.01, Netscape 6.2 or above is recommended.

The embedded web server provides access to configuration and management pages for the MFP server and the connected peripheral device.

Using Embedded Web Server

Before you can use the embedded web server, the MFP server must be configured with an IP address. The default IP address of MFP server is **192.168.0.10** and the subnet mask is 255.255.255.0.

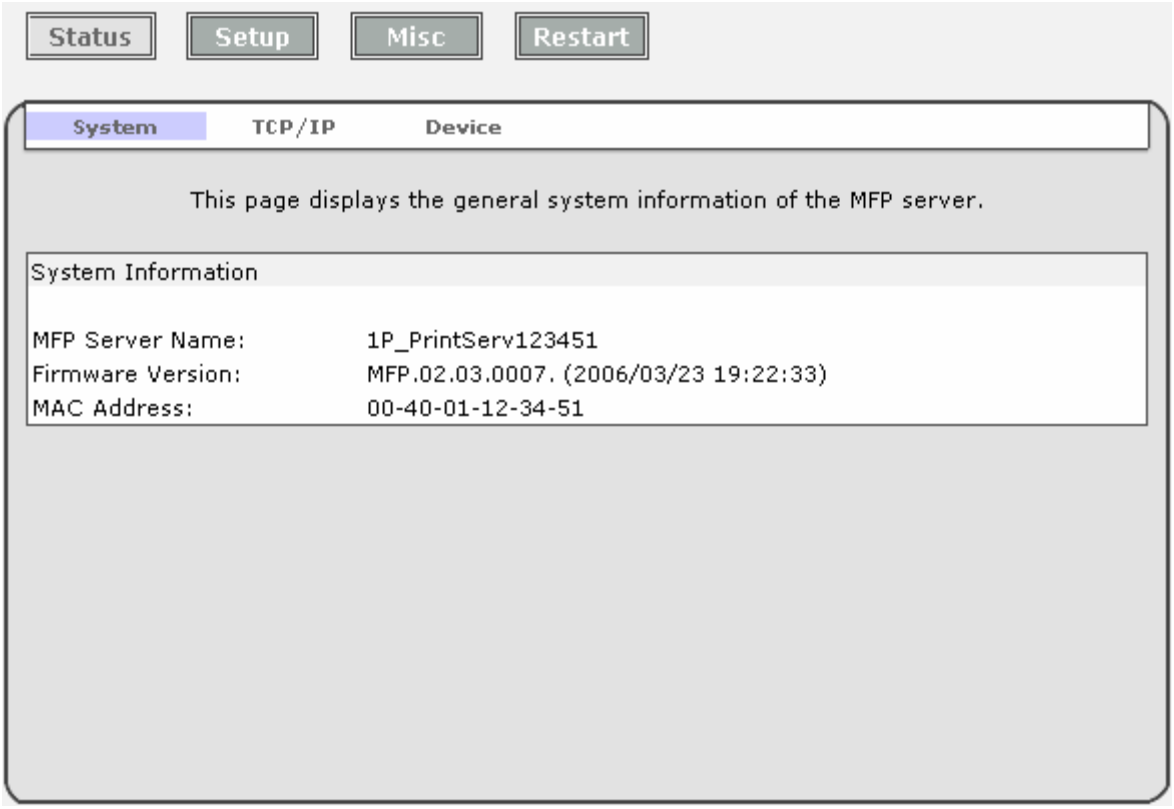
Status Menu

Enter the IP address of the MFP server as the URL, for example, **192.168.0.10**. Then the MFP server's built-in web interface will appear in content of the web browser.

System Status

1.Click **Status**, it then appears the sub-menu.

2.Click **System**, it then as shown in the following picture.



MFP Server Name: This option allows you to view device name of the MFP server.

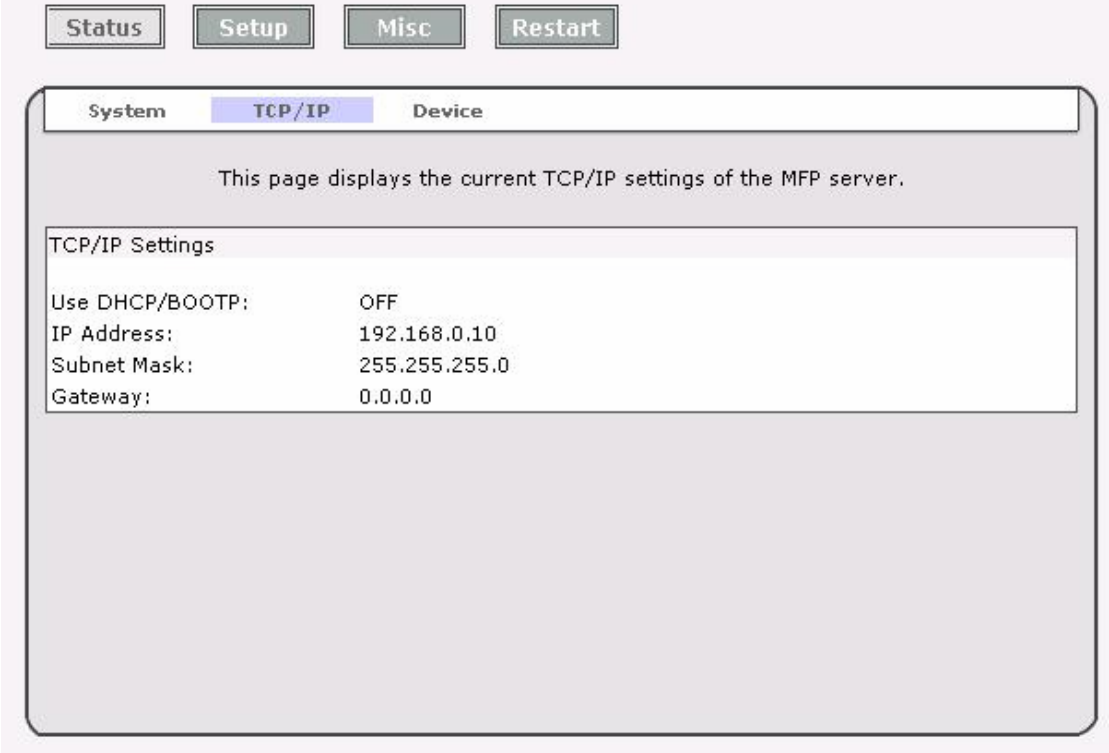
Firmware Version: This option allows you to check the firmware version of the MFP server.

MAC Address: This option allows you to view Node ID of the MFP server. The Node ID is unique from any MFP server.

TCP/IP Status

1.Click **Status**, it then appears the sub-menu.

2.Click **TCP/IP**, it then as shown in the following picture.



Use DHCP/BOOTP: This option allows you to view DHCP/ BOOTP status. If there is a DHCP/BOOTP server on your network, this option allows the MFP server to obtain IP-related settings automatically from your DHCP server.

IP Address: This option allows you to view IP address from the MFP server. The IP address must meet the IP addressing requirements of the network segment.

Subnet Mask: This option allows you to view subnet mask from the MFP server. The IP address must meet the IP addressing requirements of the network segment.

Gateway: This option allows you to view gateway from the MFP server. This IP address of gateway must meet the router or gateway to go across of the network segment.

Device Status

1. Click **Status**, it then appears the sub-menu.
2. Click **Device** it then as shown in the following picture about the status of connected MFP.

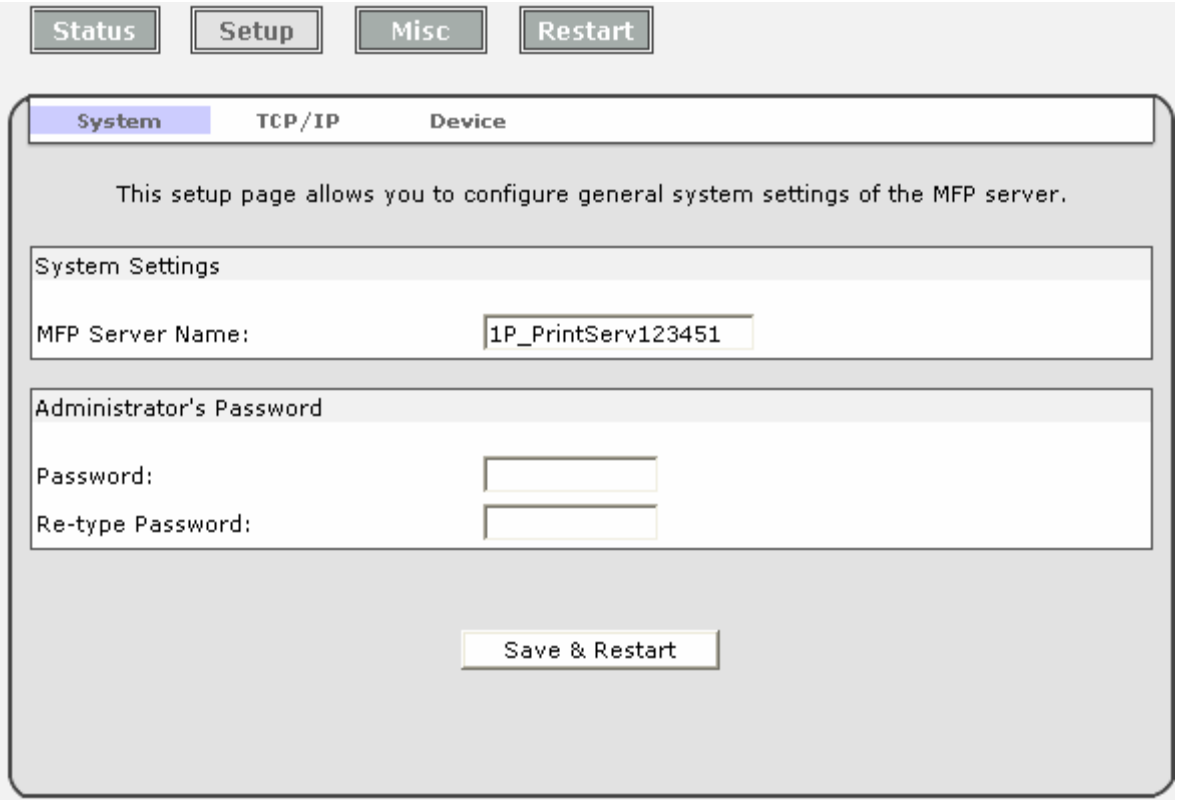
Setup Menu

Enter the IP address of the MFP server as the URL, for example, 192.168.0.10. Then the MFP server's home page will appear in content of the web browser.
Please follow this information in the setup menu of the MFP server:

System Setup

1.Click **Setup**, it then appears the sub-menu.

2.Click **System**, it then as shown in the following picture.



MFP Server Name: This option allows you to change device name of the MFP server.

Password: This option allows you to input setup password of the MFP server. When you select setup menu of web configuration from the MFP server, it then as shown in the following picture.

- **User Name:** You must input the default administration user name: **admin** as login user name.
- **Password**: The default password is empty. After setup password is completed from the MFP server, you should to remember this password to input password box.

TCP/IP Setup

1. Click **Setup**, it then appears the sub-menu.
2. Click **TCP/IP**, it then as shown in the following picture.

DHCP/BOOTP: This option allows you to select DHCP/ BOOTP option. If there is a DHCP/BOOTP server on your network. This option allows the MFP server to obtain IP-related settings automatically from your DHCP server.

IP Address: This option allows you to input IP address from the MFP server. The IP address must meet the IP addressing requirements of the network segment.

Subnet Mask: This option allows you to input subnet mask from the MFP server. The IP address must meet the IP addressing requirements of the network segment.

Default Router: This option allows you to input gateway from the MFP server. This IP address of gateway must meet the router or gateway to go across of the network segment.

Device Setup

1. Click **Setup**, it then appears the sub-menu.
2. Click **Device**, it then as shown in the following picture.

Note:

This option is reserved.

5. Upgrading MFP Server

Overview

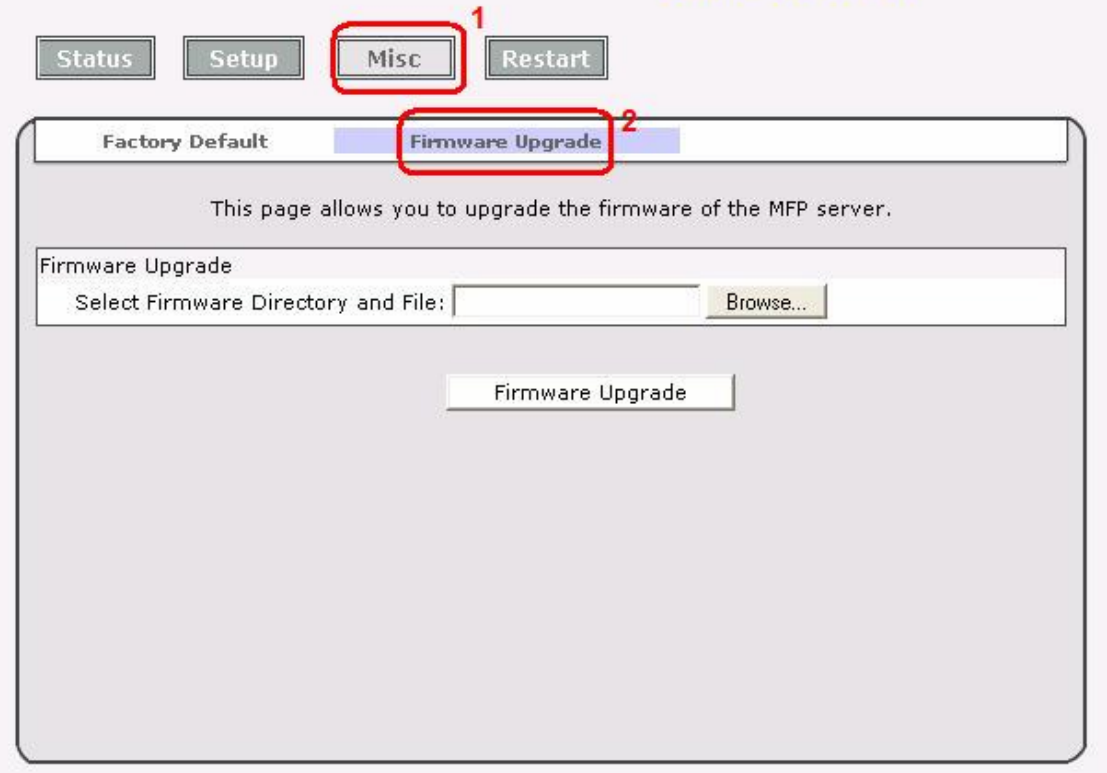
Upgrading MFP server will allow you to replace its firmware inside the MFP server while the newer software version is available from your local dealer. Please refer to the following list for your systems.

Note: 1. Before you proceed to upgrade the MFP server, please ensure that the necessary binary file is correct.

2. Before upgrading MFP server, please ensure MFP server is not printing, scan or fax.

Upgrading the MFP server by Web Browser

1. Ensure binary file is located in your current working directory.
2. Enter the IP address of the MFP server as the URL.
3. Click **Misc**, and then choose **Firmware Upgrade**, it then as shown in the following picture.



4. Click **Browser** and select the firmware file.
5. Click **Firmware Upgrade** button.
6. Done.

6. Troubleshooting

General Troubleshooting Overview

The most common problems, which cause the MFP server to perform improperly, are covered in this chapter. If a problem still exists after reading this chapter, please contact your dealer for technical support.

LED Light Indicators

The MFP server is equipped with LED to assist in diagnosing problems that are the result of the network and/or the MFP server hardware itself.

Status (Orange)

When the MFP server unit is powered on, the ***Status*** LED will flash six times as part of the unit's **P**ower **O**n **S**elf **T**est (**POST**). This indicates that the MFP server hardware is properly configured.

Note: Make sure that the Orange LED flashes six times (**POST**) upon connecting the power. If the unit does not flash six times, contact your dealer for a replacement or repair.

Flow/Link (Green: 100M; Orange: 10M)

If the network cabling is Twisted-Pair Cable, and when this light is ON, the Twisted-Pair cable connection is problem free.

USB Link (Green: 2.0; Orange: 1.1)

If the MFP port is USB 1.1, orange led.
If the MFP port is USB 2.0, green led.

Cable Related Problems

In most cases, the MFP server fails to send and receive network data due to incorrect use of the network cable and/or to connector problems. Twisted-Pair Cable is 10BaseT/100BaseT 8-wire Unshielded Twisted-Pair Cable. The pin assignments for the RJ-45 connector used for this cable must conform to the UTP cable specifications.

Power Related Problems

The MFP server requires an external AC power adapter in order for it to function. If you have a power problem, check to see whether the power cord or its connectors are damaged. More importantly, check to see that the AC power adapter included with the MFP server matches

the AC voltage in your country or area. Using an incorrect AC adapter will damage your MFP server.

USB Port Related Problems

Printing data failure may be caused by a loose connection of the MFP server to the USB port of the printer. Check to see if the USB connectors are damaged. In addition, check the cable connection. If the connectors are damaged, contact your dealer for a replacement connector.

Appendix:

Load Default Setting

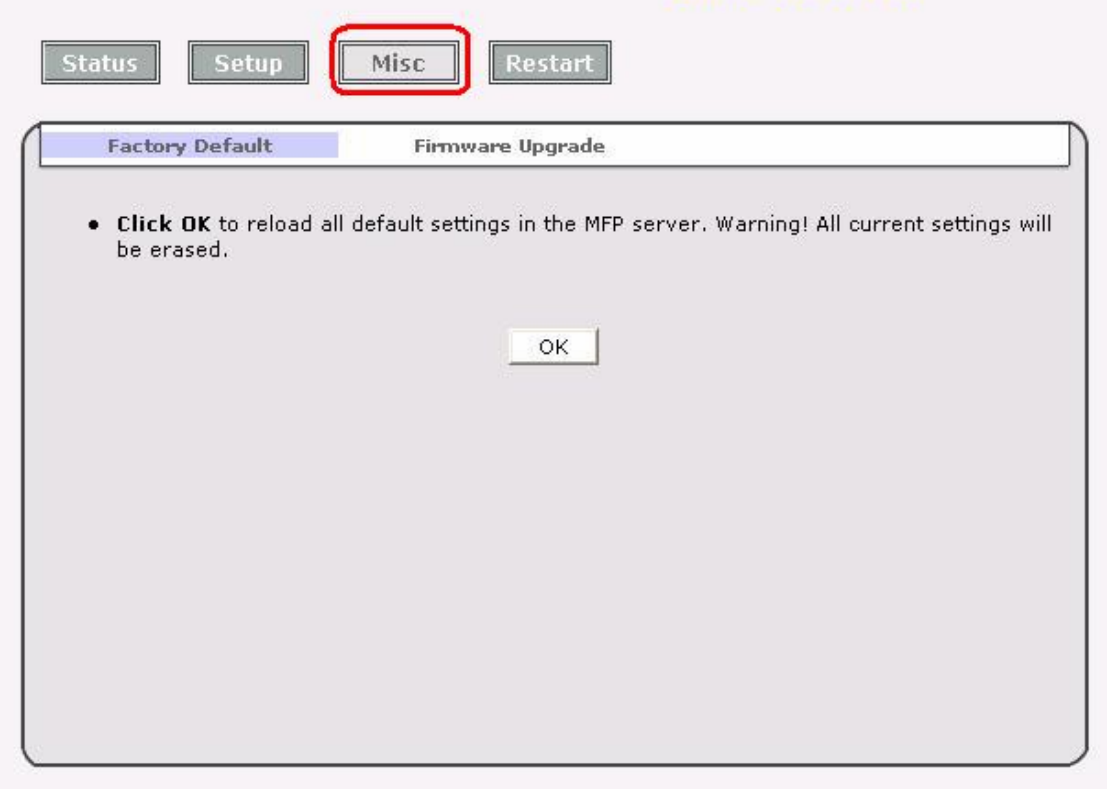
1. Disconnect the external power adapter.
2. Hold down the reset button.
3. Reconnect the external power adapter. Wait about 5~6 seconds.
4. Release the reset button.
5. The MFP server will restart.

WARNING: This will erase all settings of MFP server to default and should be performed with caution!

After performing a factory default, the default settings will be:

- DHCP client: off
- IP address: 192.168.0.10
- Subnet Mask: 255.255.255.0

Or, you can load the default setting from the WEB management as following:



Reboot the MFP server:

1. Verify the power of MFP server is turned on.
2. Press the reset button once, and then release it.

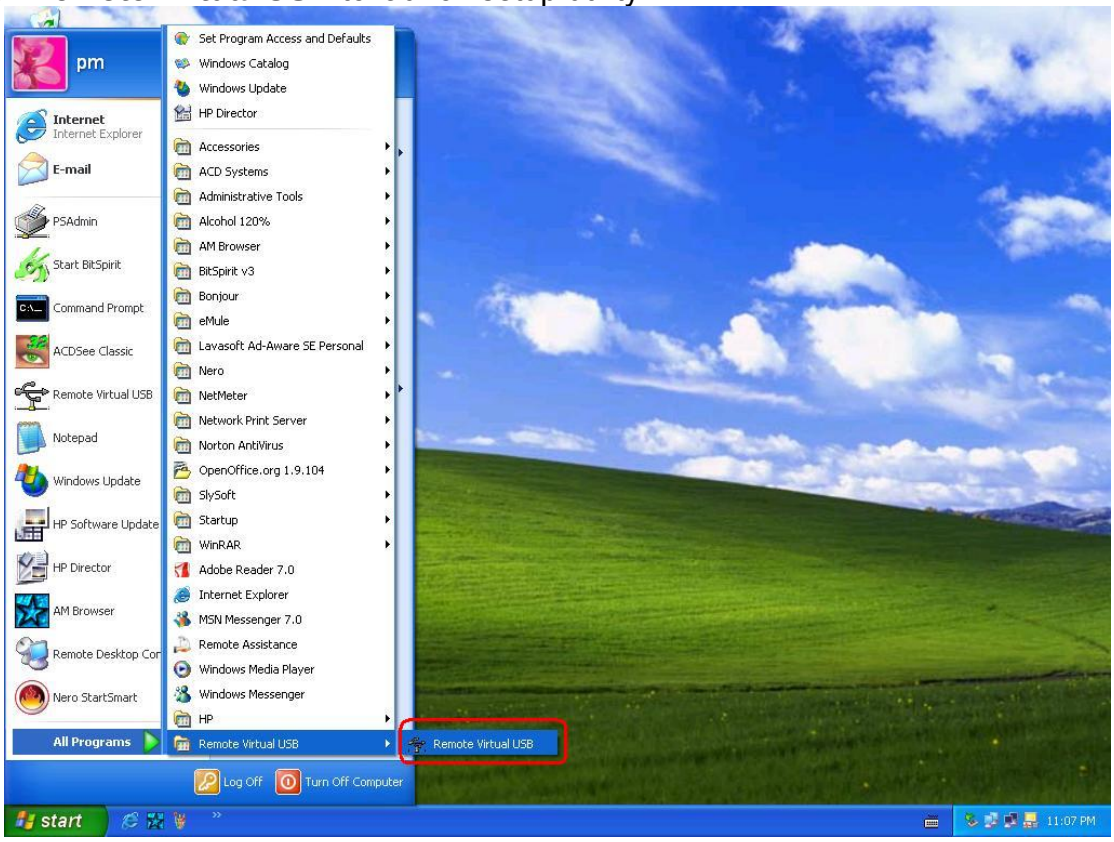
Or, you can click the Restart button from the WEB management as following:

WARNING: This will restart the MFP server and stop all on-going and pending job jobs!

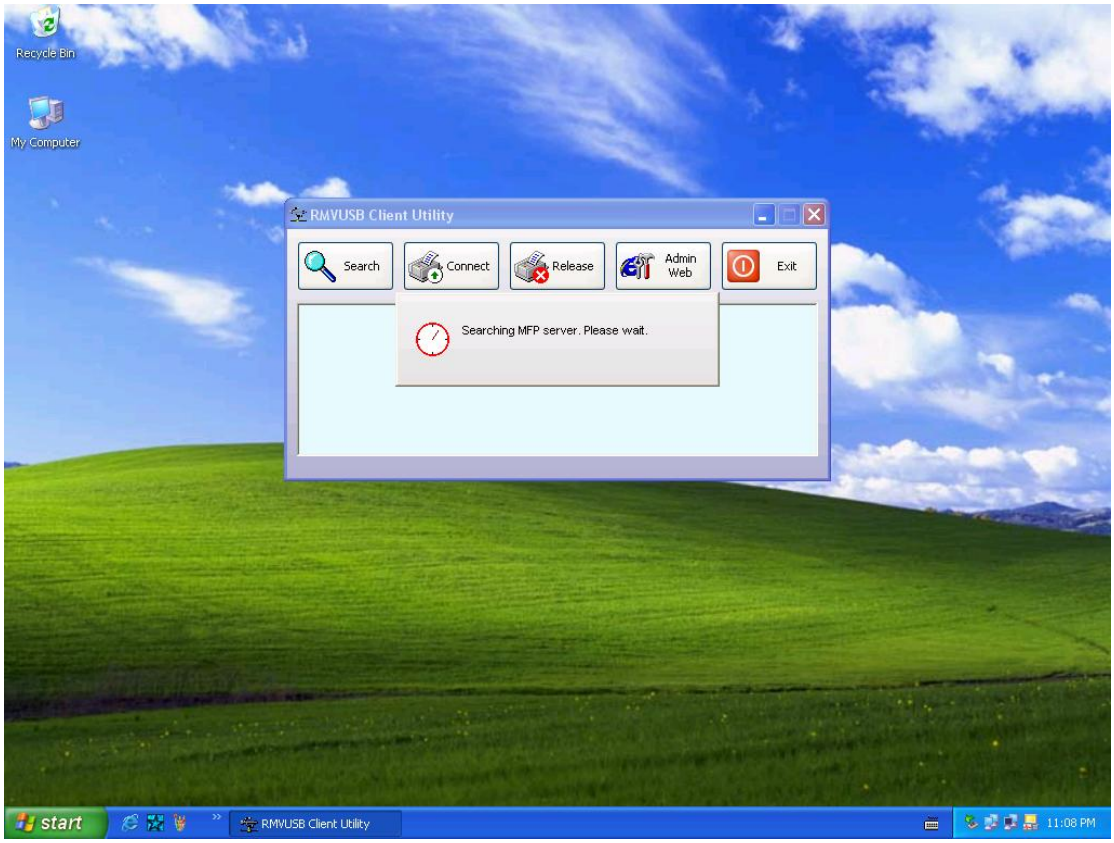
How to Scan via MFP Server

You can use the proprietary utility of MFP printer, e.g. HP Director. Or, you can use the Windows embedded scan utility (WIA, **W**indows **I**mage **A**cquisition) as following steps:

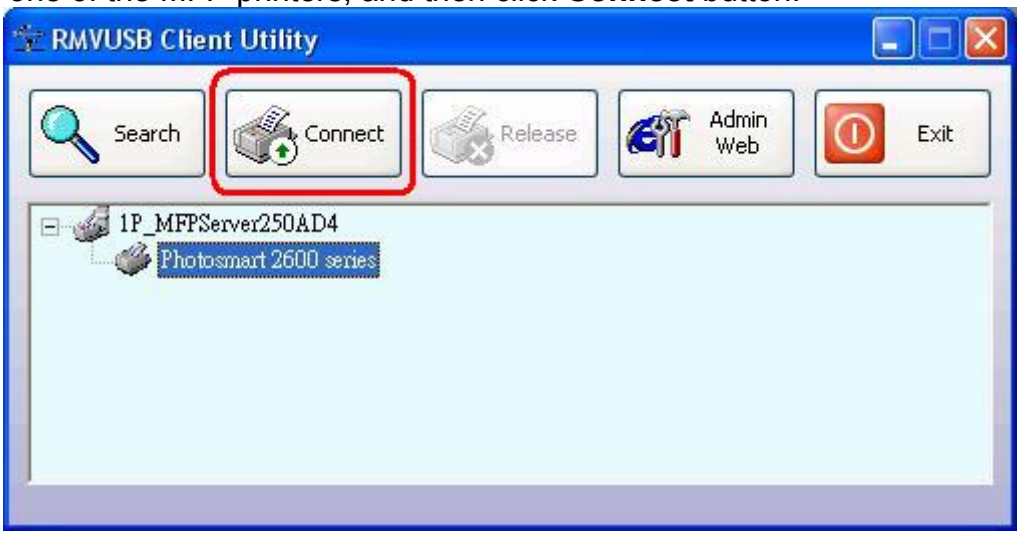
1. Start to setup MFP server. Click **start** -> **All Programs** -> **Remote Virtual USB** folder; click **Remote Virtual USB** to launch setup utility.



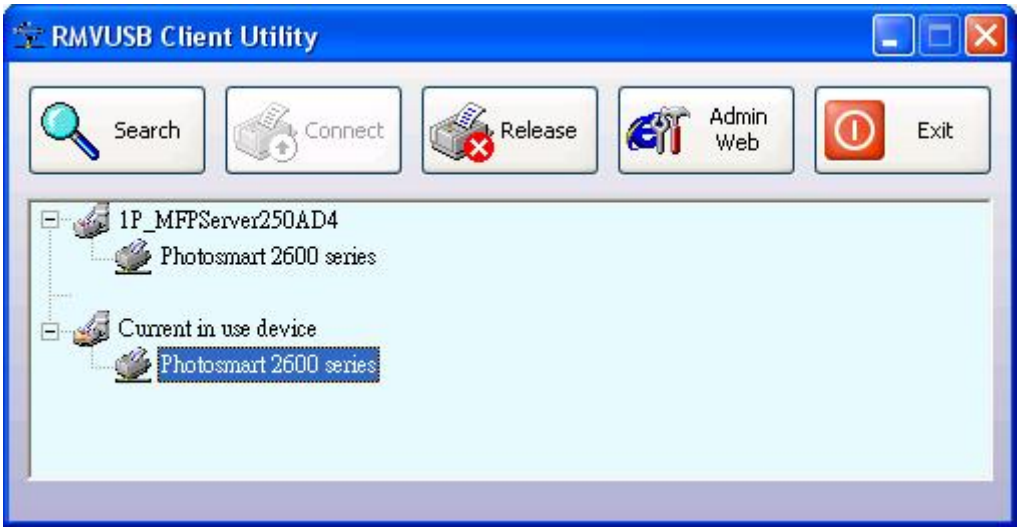
2. Setup utility will search all the MFP servers located on your private network.



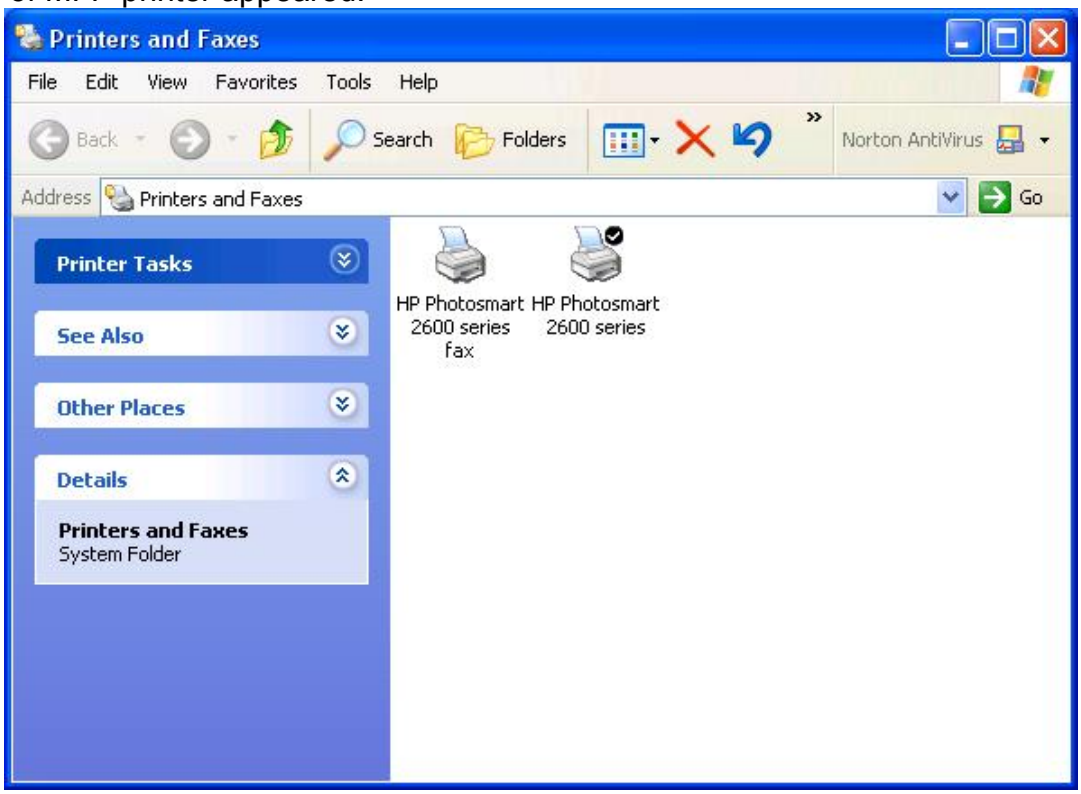
3. Select one of the MFP printers, and then click **Connect** button.



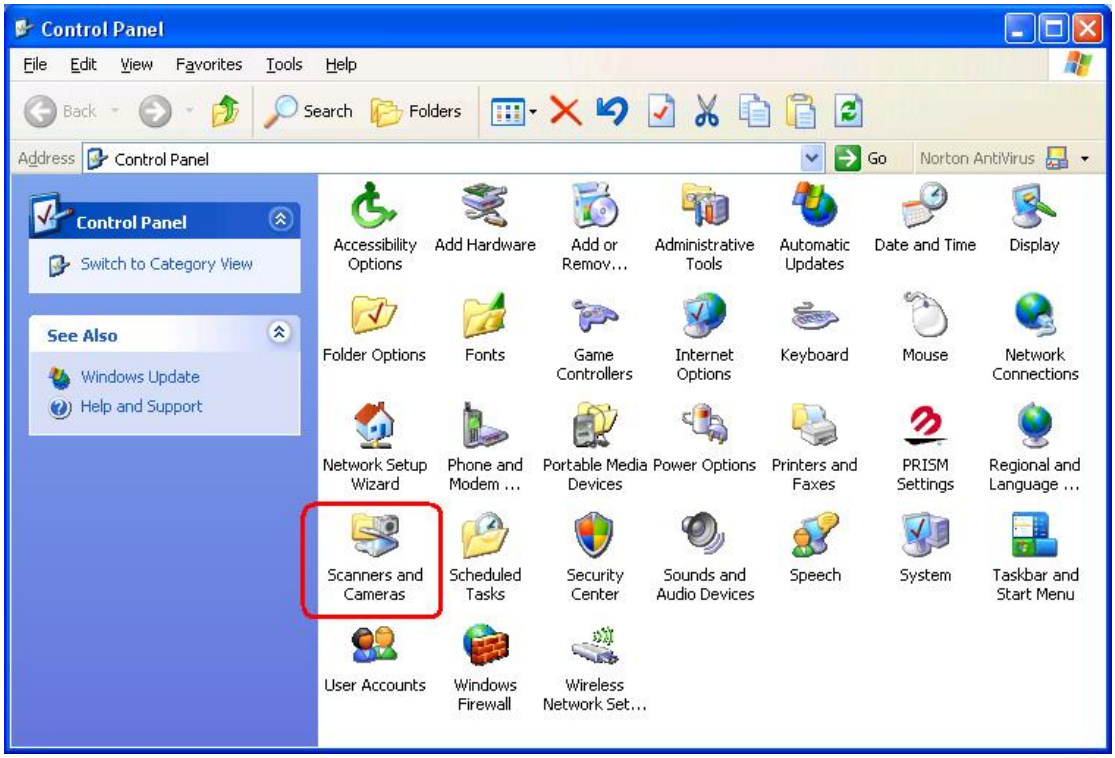
4. Make sure the detection of MFP printer is correct.



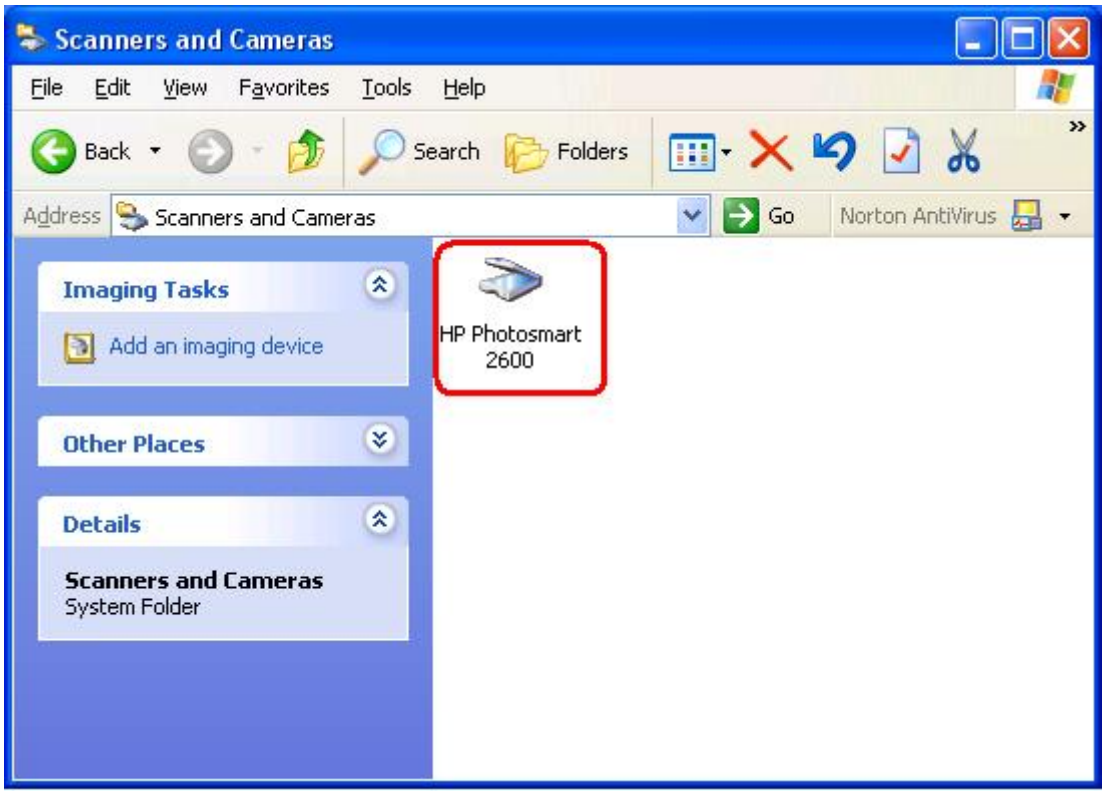
5. From Windows 2000/XP system, go to **start** -> **Printers and Faxes** and make sure of the icon of MFP printer appeared.



6. Double click the **Scanners and Cameras**.

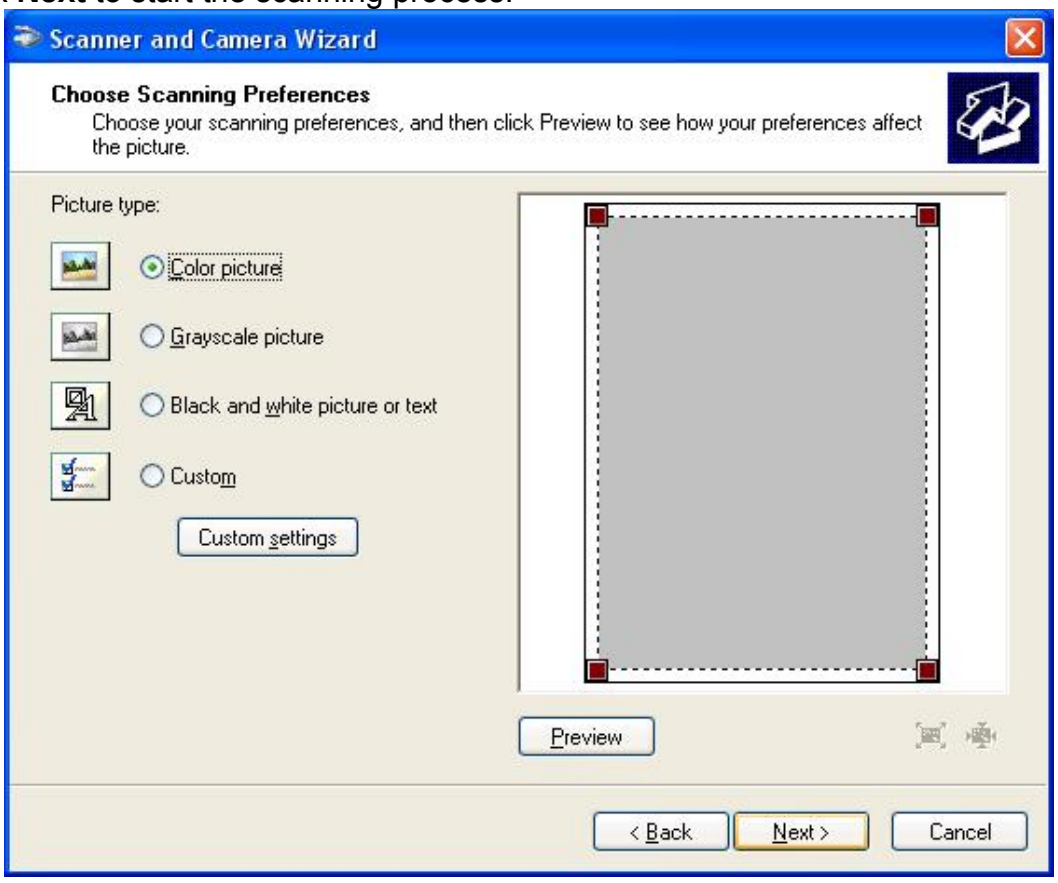


7. Double click the MFP device icon to launch **Windows Scanner and Camera Wizard**.

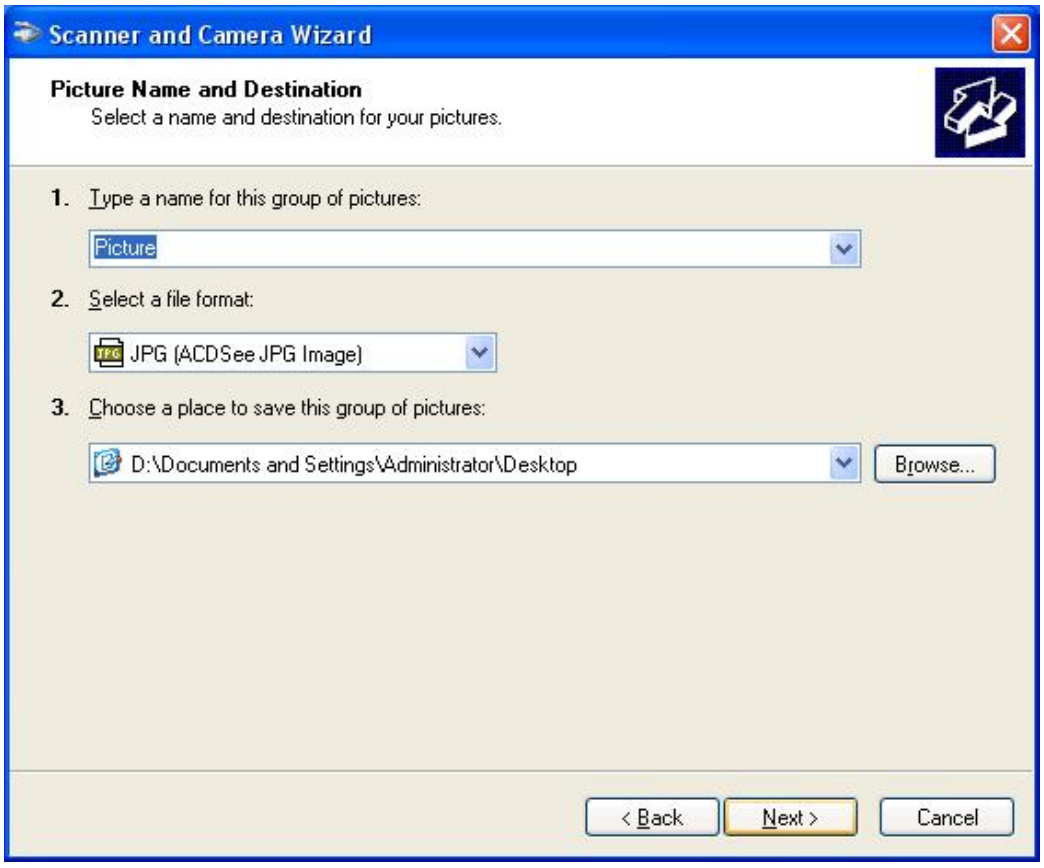


8. Click **Next**.

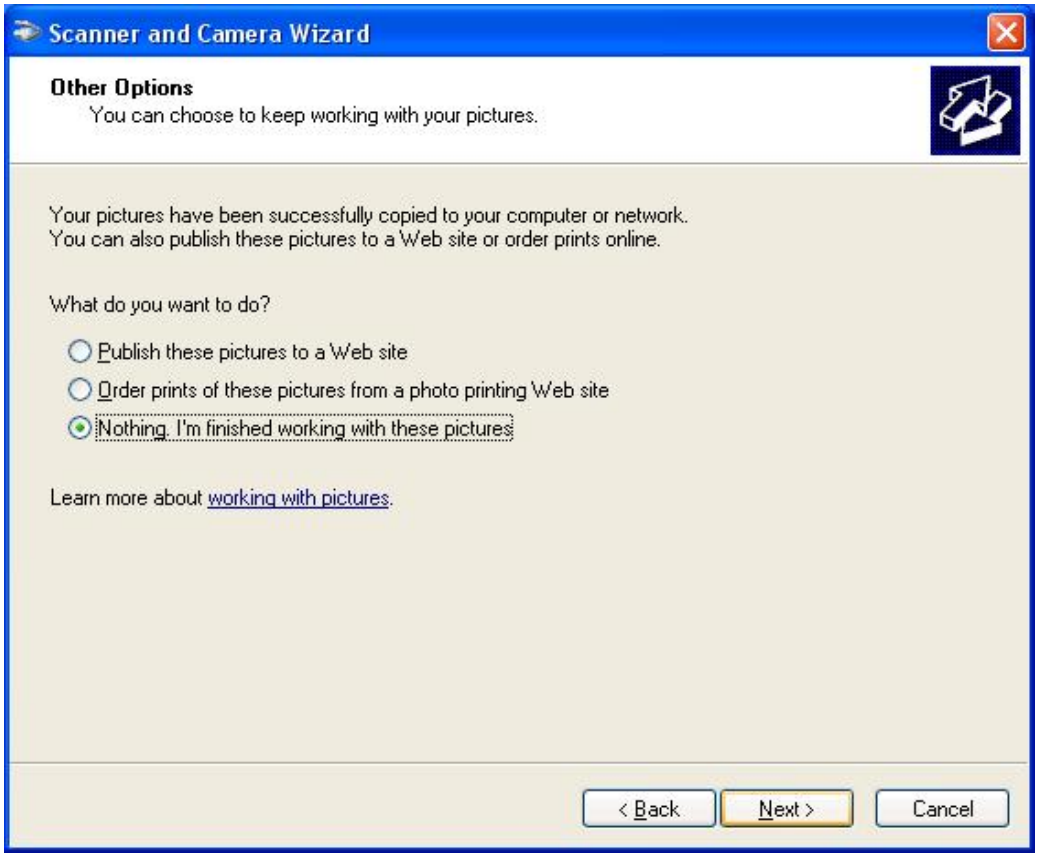
9. Click **Next** to start the scanning process.



10. Click **Next**.



11. Click **Next**.



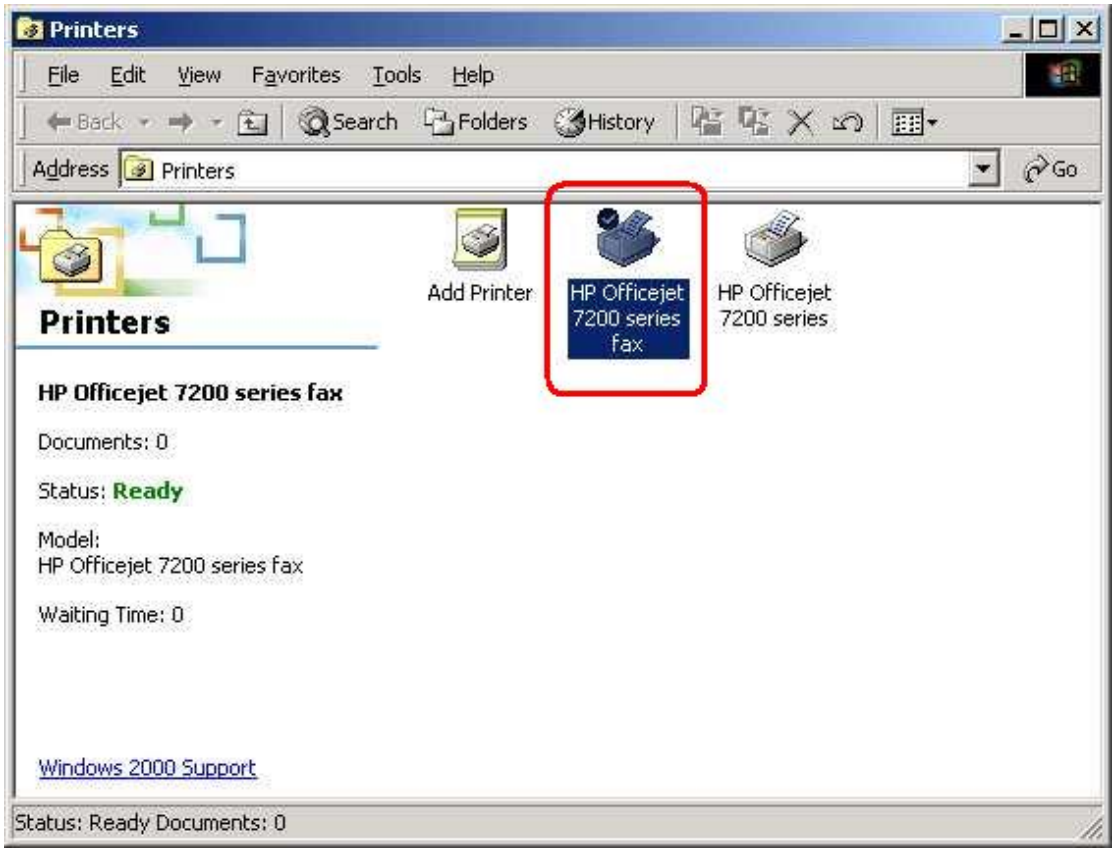
12. Click **Finish**.

How to Fax via MFP Server

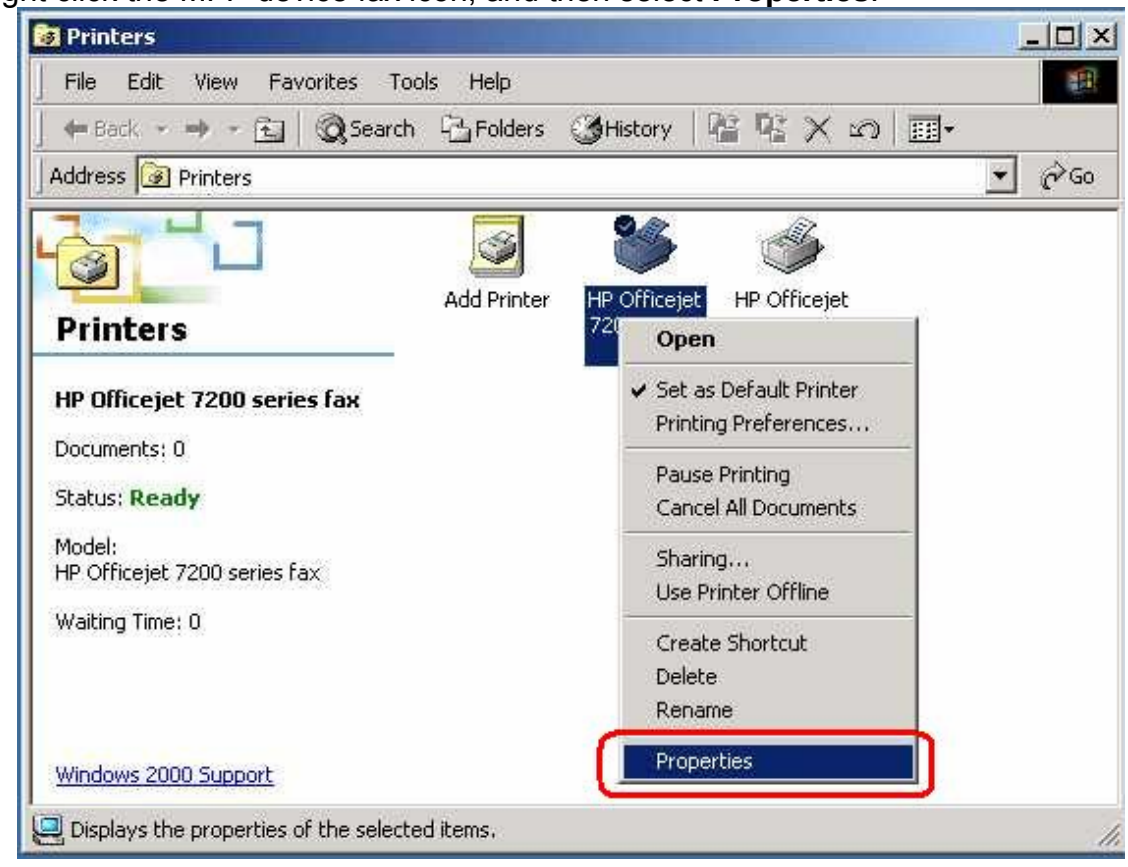
You can use the proprietary utility of MFP printer, e.g. HP Director. Or, you can use the Windows embedded fax utility, for example, send a **Test Page** to remote fax machine.

1. Repeat the step-1 to step-5 of the above section about **How to Scan via MFP Server**.

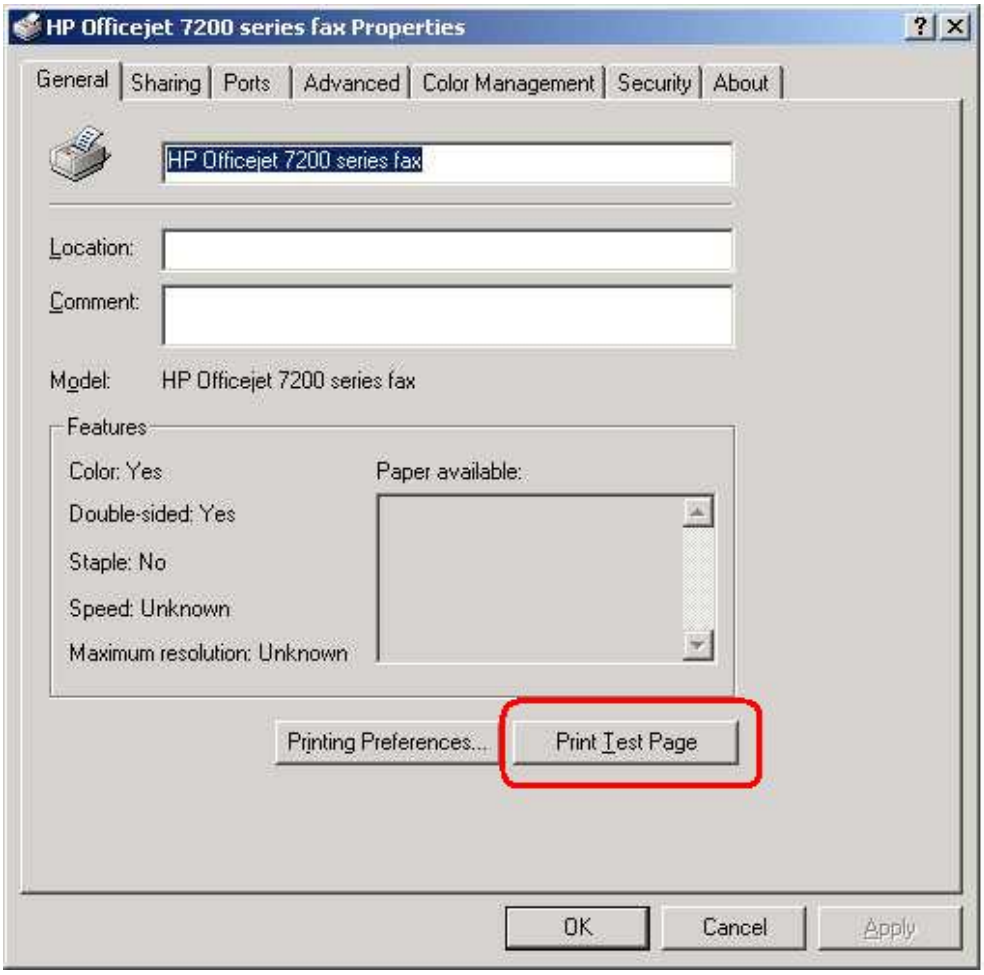
2. Select the MFP device fax icon.



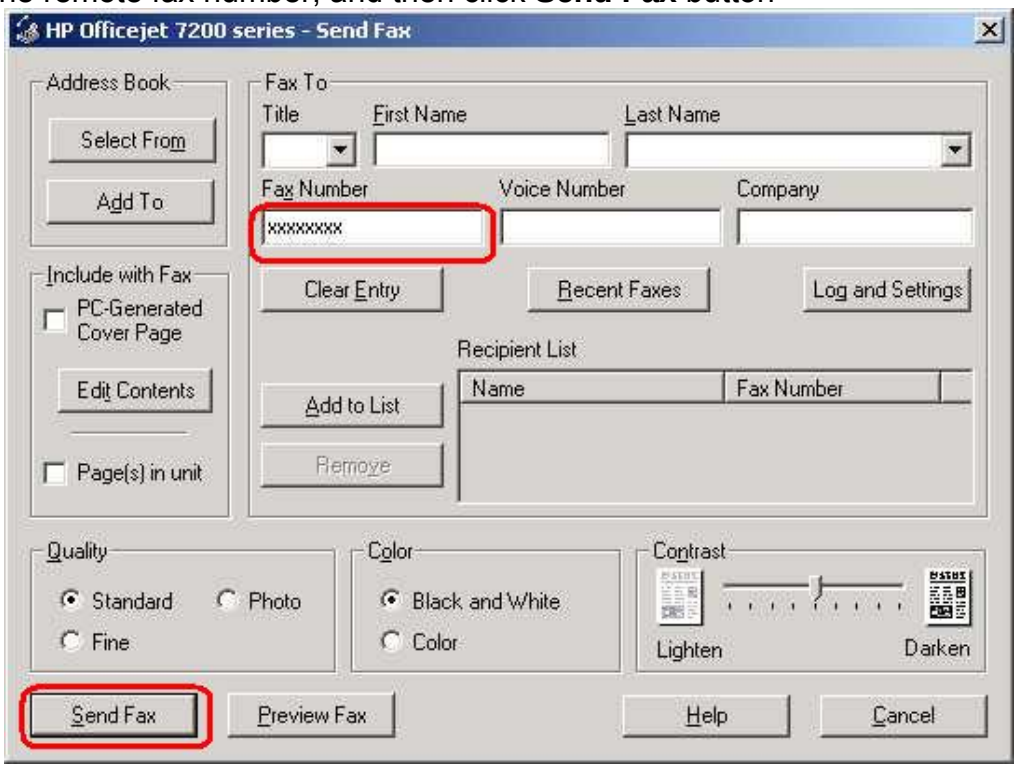
3. Right click the MFP device fax icon, and then select **Properties**.



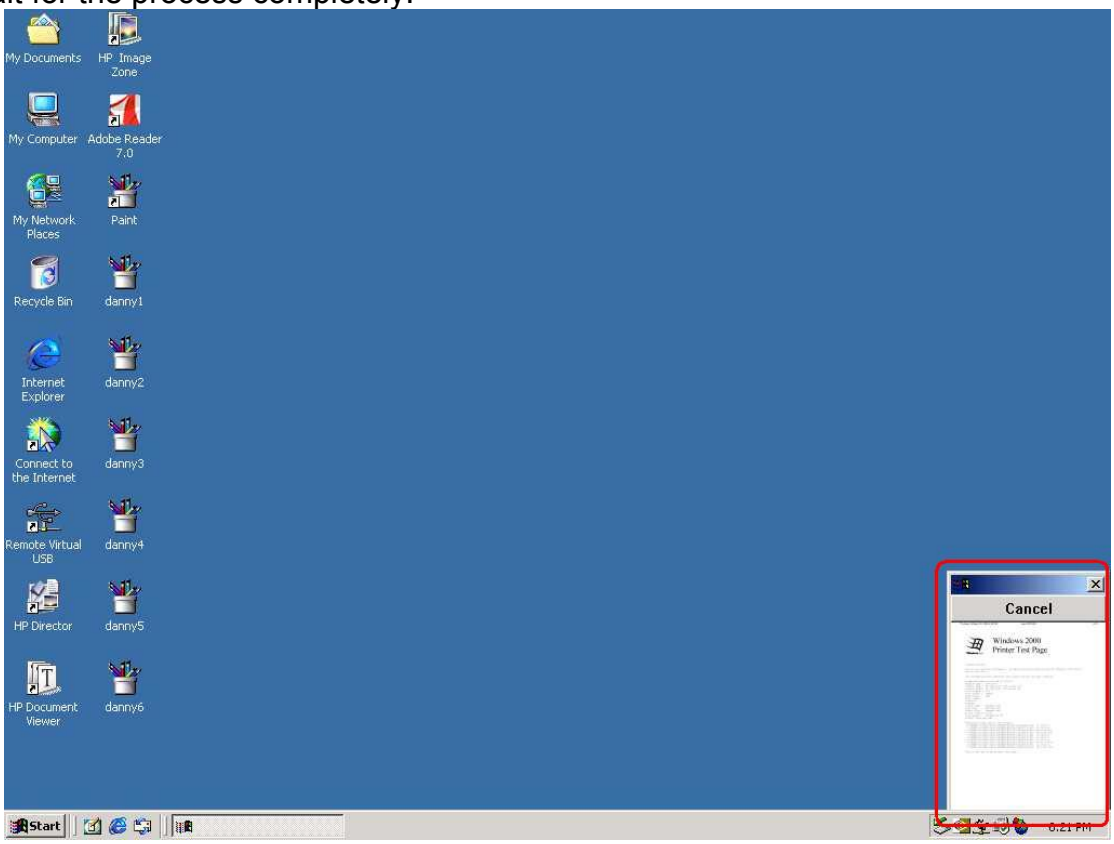
4. Click the **Print Test Page** button.



5. Input the remote fax number, and then click **Send Fax** button



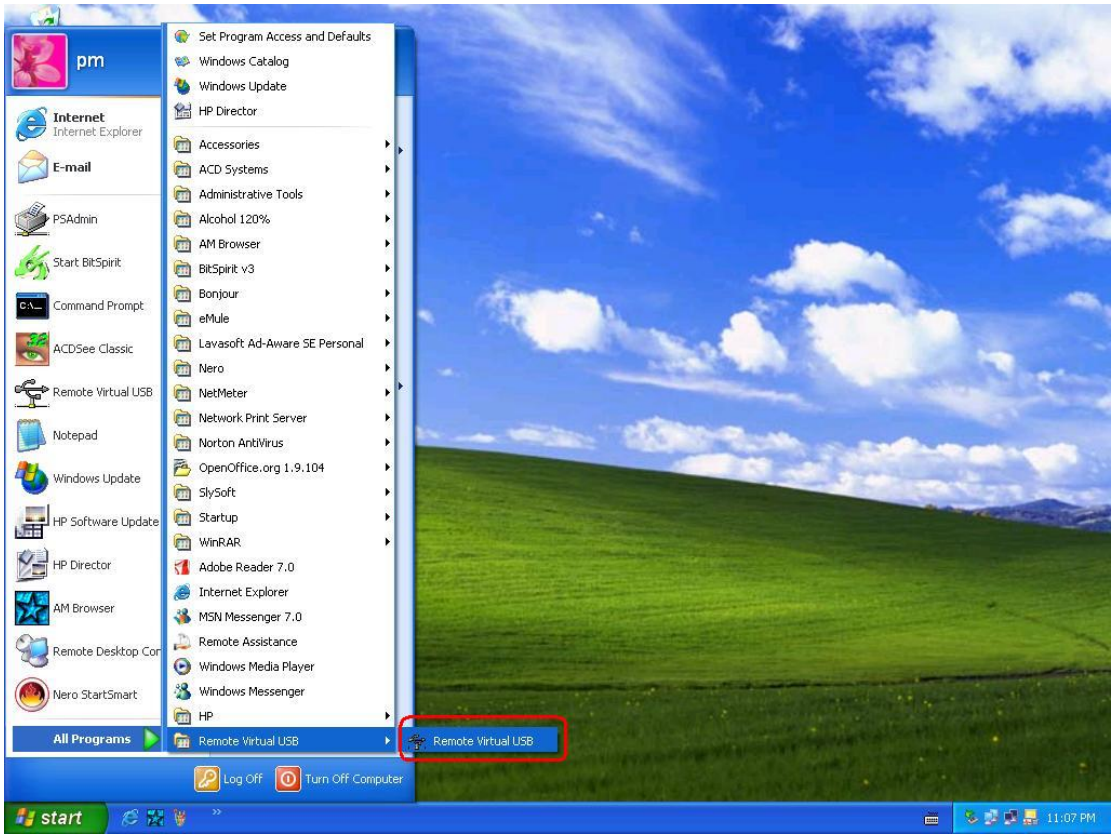
6. Wait for the process completely.



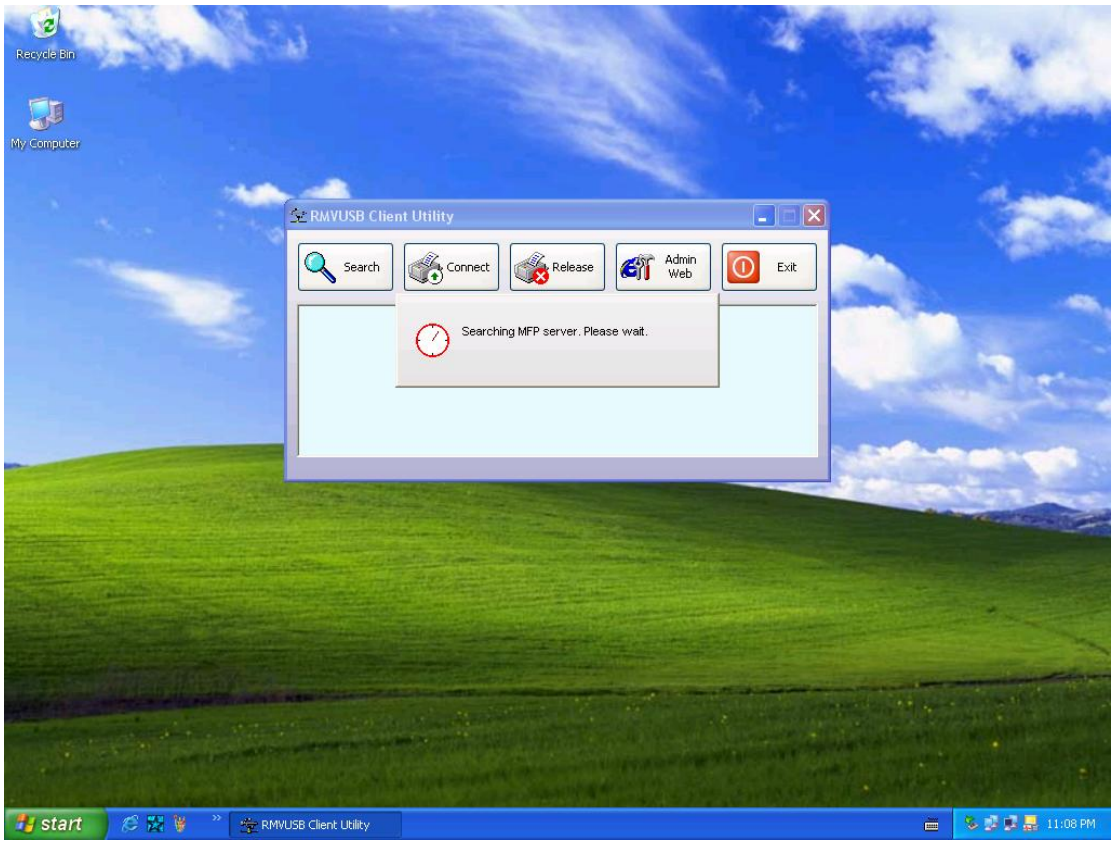
How to use Storage of your MFP

You can use the RMVUSB Client utility as following steps:

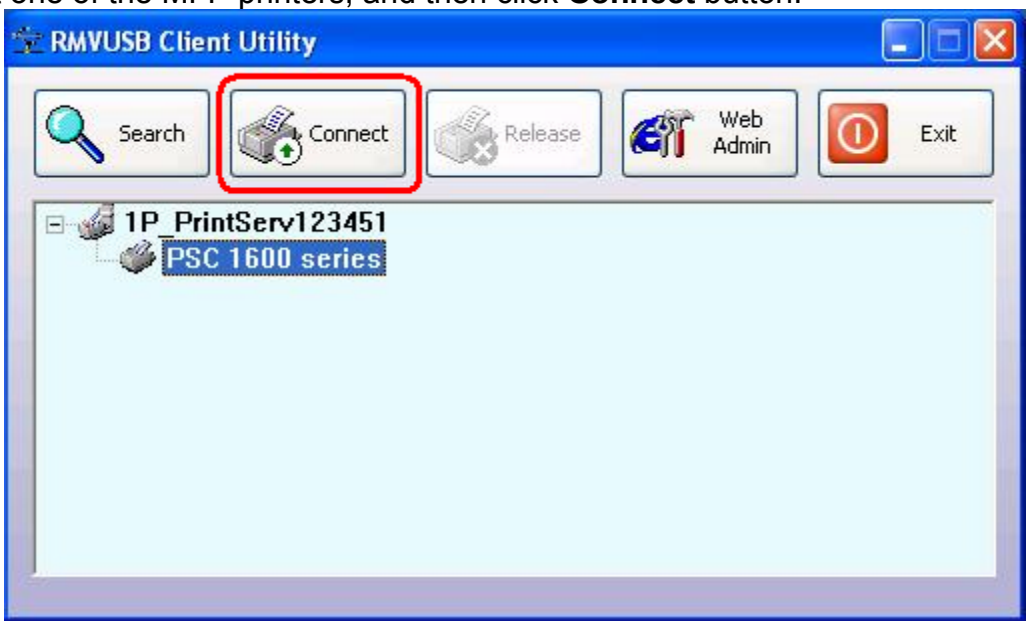
1. Start to setup MFP server. Click **start** -> **All Programs** -> **Remote Virtual USB** folder; click **Remote Virtual USB** to launch setup utility.



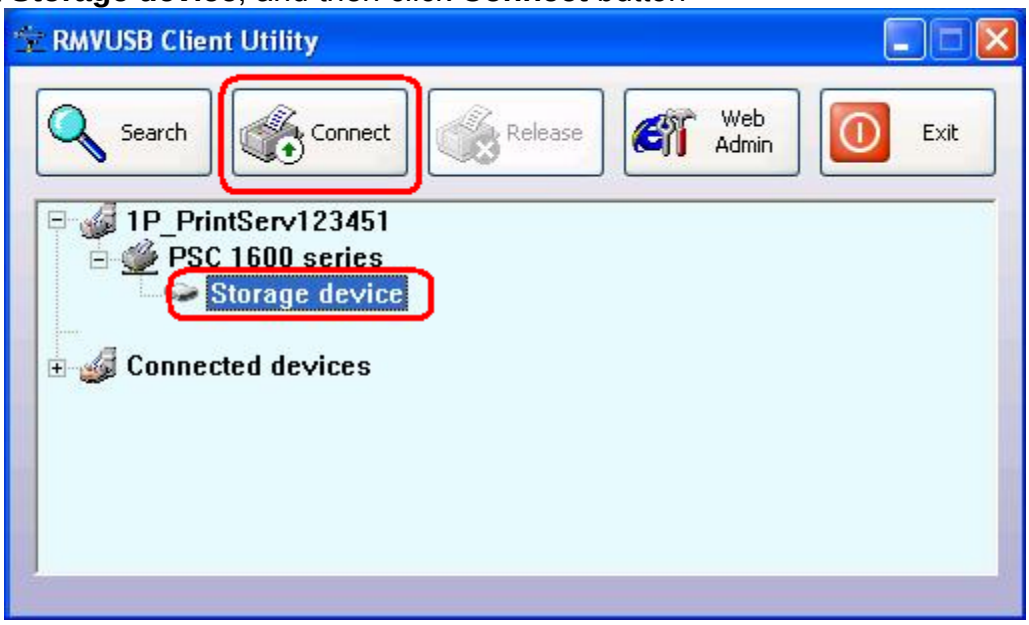
2. Setup utility will search all the MFP servers located on your private network.



3. Select one of the MFP printers, and then click **Connect** button.

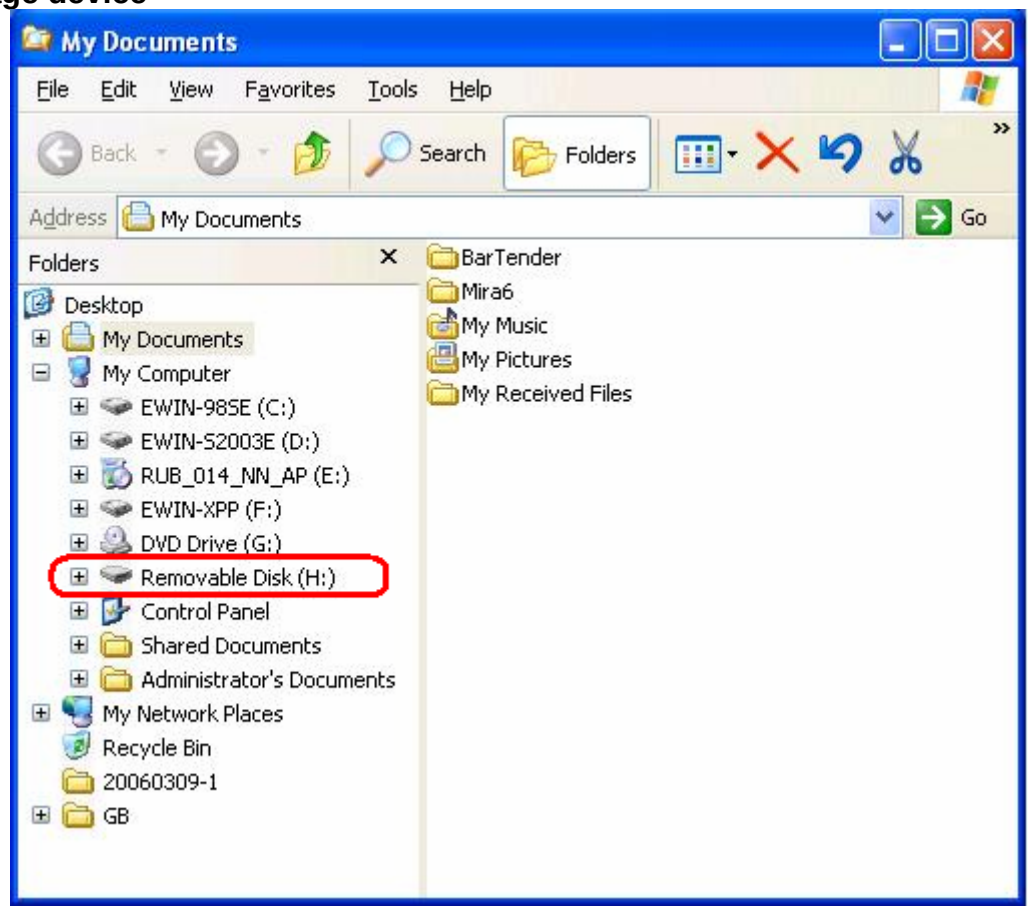


4. Select **Storage device**, and then click **Connect** button



5. See your **Connected devices**, if add a **Storage device**, it's connect OK

6. Star **Windows Explorer** (Star → Programs → Accessories → Windows Explorer) Click **My Computer**, you can see a **Removable Disk**, the **Removable Disk** is **MFP Storage device**



Frequently Asked Questions

Question A
The Status LED light keeps blinking after POST.

Answer:
The last upgrade process was not completed. The MFP server must be upgraded again.

Question B
The MFP server software installation is not allowed at your computer.

Answer:
Please make sure the setting of driver signing is set to default from your Windows Start menu: **Control Panel** -> **System** -> **Hardware** -> **Driver Signing**.

Question C

The MFP server utility can't find MFP server.

Answer-1:
The Windows Firewall installed in your computer blocks the connection.

If no MFP server is found, please make sure the Windows Firewall or any third party firewalls have been disabled or bypassed and click the **Search** button to try again.

Answer-2:
The IP address segment is different between computer and MFP server.

Change the default IP address (192.168.0.10) of MFP server to match your network segment by Web management. If you changed the default IP address and forgot it, please refer to the above section about the **Load Default Setting**. To make sure the default IP address of MFP server is restored.