4-PORT
NETWORK USB HUB

User Manual

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Introduction

The revolutionary USB Server Hub utilizes technology that streamlines and enhances functionalities between USB devices and multiple PCs. Current solutions from other companies provide minimum functionalities at high costs. They use significant amounts of resources and effort to achieve the required features, whereas the USB Server Hub utilizes significantly less resources for more features. Most solutions allow printer-only peripheral devices. However, USB Server Hub allows you to use a multifunction combo device, such as a printer-scanner or printer-fax all-in-one! Another added benefit is that you can connect multiple printers/scanners/faxes to the USB Server Hub. These are just some of the features that make our product one of the standards today. The USB Server application provides a user friendly interface between you and the USB Server Hub, enabling you to monitor, manage and use the convenient and powerful functions provided by USB Server Hub.

Features

The USB SERVER HUB is based on a high-performance processor architecture allows you to share 4 USB devices among users on your network no matter what you connected with wire or wireless router. It features four high-speed USB 2.0 ports for simultaneous connection to the devices an RJ-45 port for connecting to a LAN. It can support USB devices including multi-function printers, scanners, hard drives and flash media readers. Installation and operation is quick and easy via a user friendly application software utility.

- Networking printer server sharing.
- Controls USB 4 ports via user friendly application software.
- Monitors USB devices status via application software.
- Matrix USB ports sharing connection by multi-users.
- Live device status monitoring via both application software or web browser.
- Manages printing jobs by printer name instead of IP address.
- Embedded USB 2.0 host controller and transceiver, totally compliance with USB 1.1 / USB 2.0 (Hi-Speed) specification.
- Embedded Ethernet 802.3/3u transceiver, compliant with 100BASE-TX and 10BASE-T PMD level standards.
- Supports DHCP, configures IP Address automatically.
- Supports LED indicators for USB devices connected and power-on.
- Comply with Windows XP / VISTA.

Specifications

Specification	
Model Number	
Devices Connection	4 x USB 2.0 Ports
Host connection	1 x RJ 45
Connection Type	Cable for Cat.5/ 5e / 6
Compliance with USB version	USB 1.0 / 1.1 / 2.0
Ethernet Compliance	100BASE-TX and 10BASE-T PMD level standards
IP Address Setting	Support DHCP (Auto)
Max. Extend Distance	100 meter
LED Indicators	USB x 4 Blue LED / Power x 1 Blue LED
Power Consumed	500 mA
Power Source	External Power Adaptor DC 5V

System Requirement (Suggestion)

XP System:

CPU: PIII 1.0 GHz equivalent or better
Memory: 512MB or more

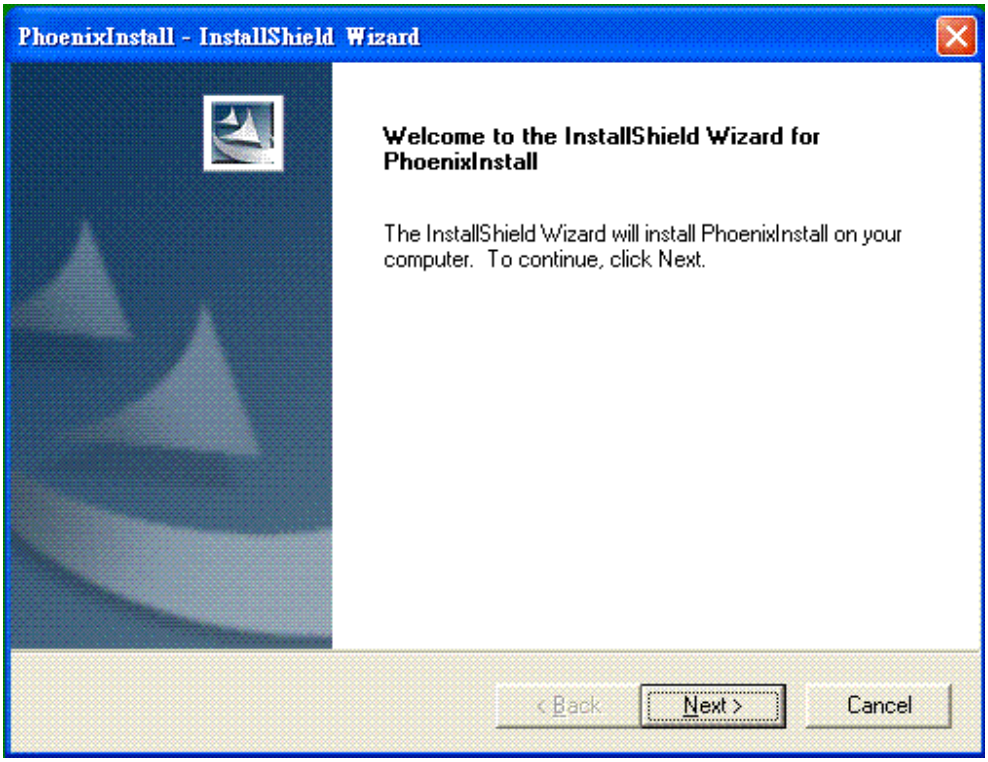
VISTA System:

CPU: P4 3.0 GHz equivalent or better
Memory: 1GB or more.

Installation

To install the USB Server Hub program, please double click the USB Server Hub setup file. A dialog box should pop up to prompt you to choose desired installing language. There are two choices: English and Traditional Chinese.

After choosing the language, click on OK. The InstallationShield Wizard will start automatically.

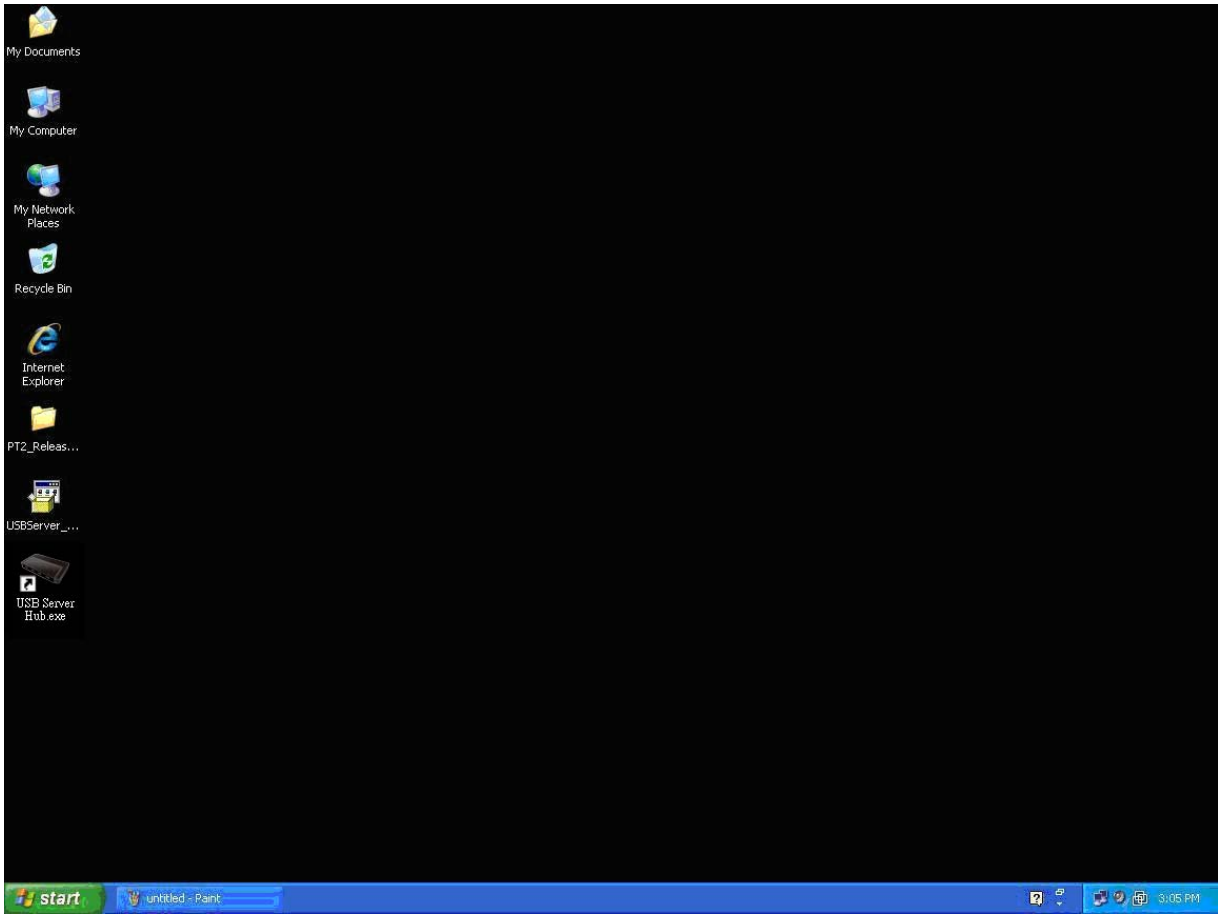


Please follow the instructions of the wizard to complete the installation process.

Please reboot the system as requested by the installer when the process ends, otherwise the software might not work properly.

Running Program

To start the USB Server Hub program, please double click the shortcut icon of the USB Server Hub on the Desktop.



This brings up the main dialog.

Main Dialog Box

The main dialog box of **USB Server Hub** is shown above. This is what you would see at program start up. It is consisted of a Control Menu (File, View and Help), a tree view, a **Search** button to get the current status of all USB Servers and devices on the network, and a button that toggles between “Config.” and “Connect” depending on the node you select on the tree view. It toggles to “Config.” when a server is selected on the tree view and to “Connect” when a device is selected. The tree view displays the all the USB Servers and devices your PC has access to.

Note: You will be allowed to set an alias name for each of the servers on for easy recognition. The alias name with its IP address will be displayed on the tree view. The way to set alias name will be described in the "Config." section below.

Status of USB Servers and Devices

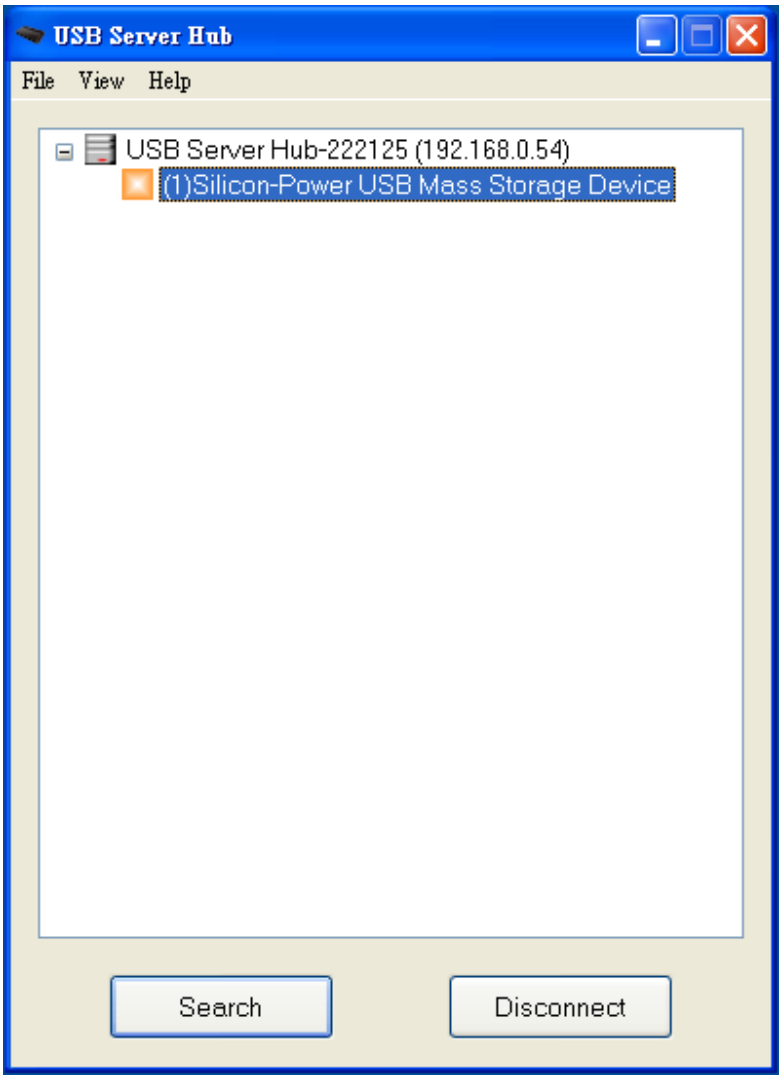
The tree view also tells you the status of all the USB Servers and devices that are accessible to you. Each of USB Server is either accessible or inaccessible. An inaccessible server is either disconnected from the network, powered off or suffers other technical difficulties that prevent it from being accessed by your PC. Inaccessible server will not show up on the tree view.

However, the devices have several kinds of demonstrated status:

Ready

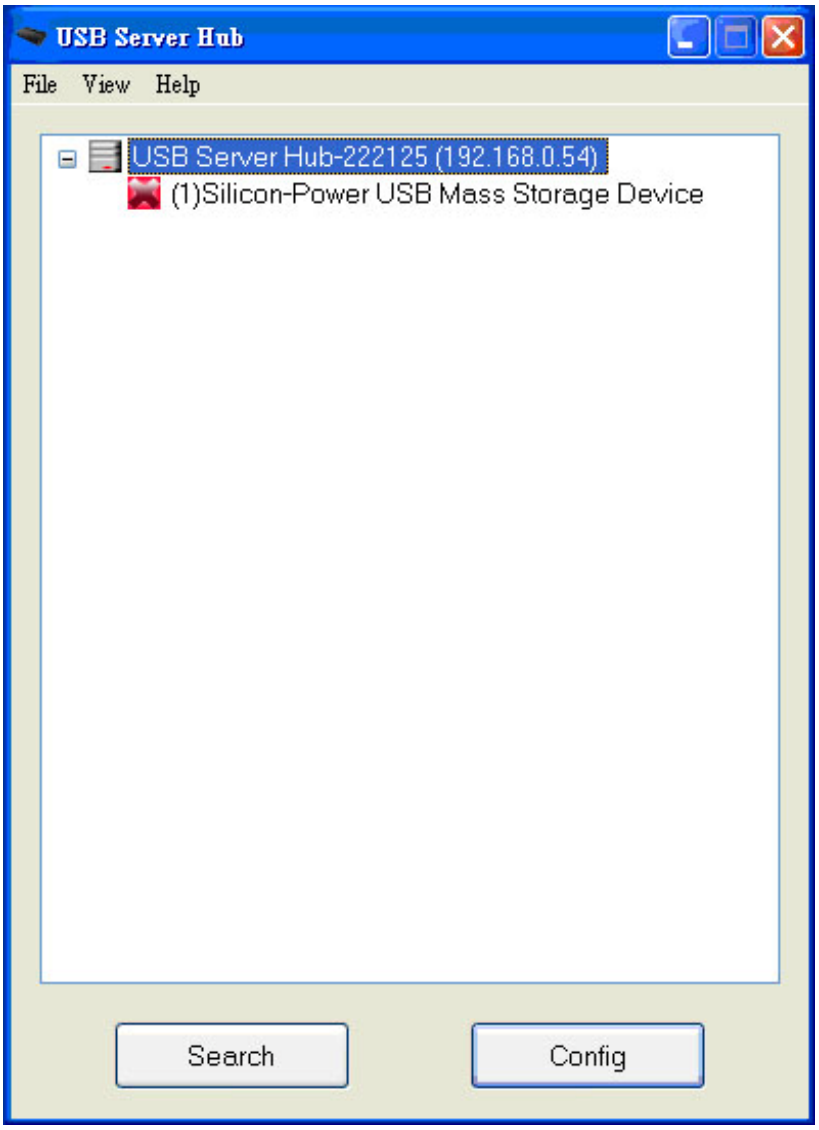
Each status is represented by an icon of different color. A device with "**Ready**" status is indicated by a square **Green** icon as shown in the picture above. This green icon indicates that the device is unoccupied and ready to be connected.

Occupied by Yourself



When you are "**Connected**" to a device, the green icon turns into an **Orange** icon to signify the establishment of the connection.

Occupied By Other User



The **Red** icon indicates the device is **occupied by another user** and you can not connect to that device at the moment.

: Device on Different Segment

Blue icon indicates that the server's IP address is on a different network segment as from yours. You can NOT connect to a device attached to such server.

: Unsupported Device

Some of the devices are not supported by USB server Hub. Such device will be identified by a red X icon. Of course, connecting to an unsupported device is not allowed.

: Self Occupied with Error

When an error happens on the device you are connected to, you will see a small exclamation mark appears at the right lower corner of the icon as show above. This problem could be that the device is a printer and it is out of ink or out of paper.

: Occupied by Others with Error

When you see this red-with-exclamation icon, it signifies that a problem occurs on the device that is occupied by another user.

: Free with Error

A green icon with exclamation mark indicates that this device is not connected by anyone but does have some type of problem such as out of ink.

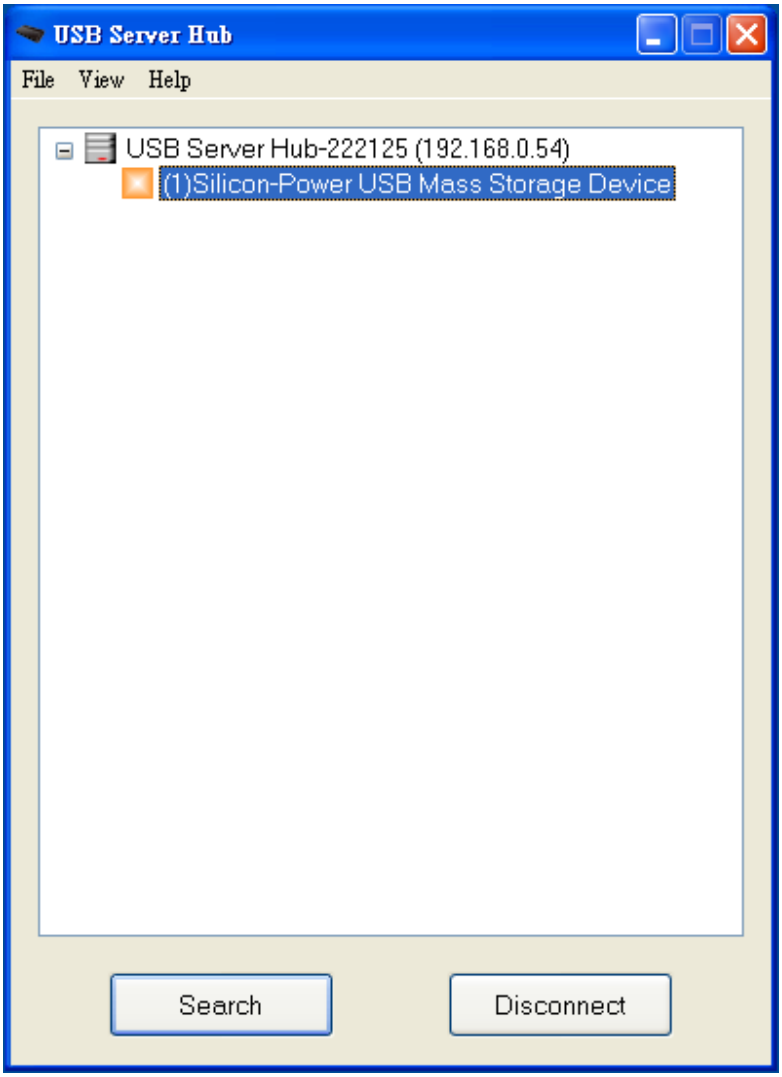
Of course, any problem indicated by the exclamation mark would prevent the device from working properly. Please resolve the problem before you continue using the device.

Accessing a Device

To connect to a USB device, please select it on the tree view and click on **"Connect"** button or double-click on it. This process might take a few seconds up to a minute, depending on the complexity of the device.

Once connected, you can use the USB device as if it is connected to your PC directly with a USB cable.

If you select a connected device on the UI, you can see that the **Connect** button is changed to **Disconnect**:



Clicking on the button disconnects you from the selected device. Once you see the icon turns green, the device has been disconnected and other users will then be able to connect to it.

Server Configuration

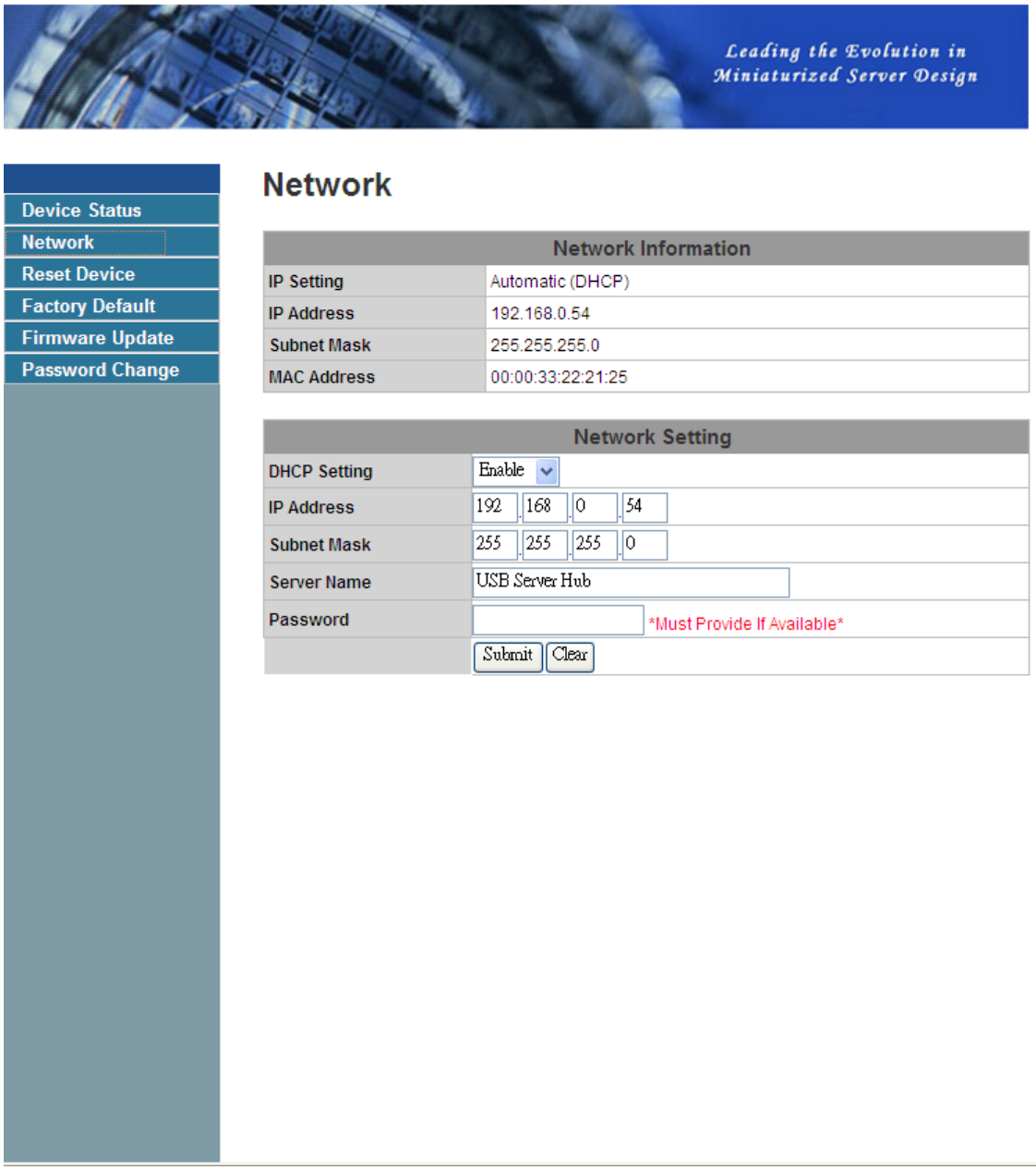
We allow the users to configure the settings of the USB Servers via the web-based UI. Select the target server on the tree view and then click on the “Config.” button or right click on the server and select “Config” option on menu to bring up this configuration UI.

Configuration with Web-based UI

Your default web browser will pop up and take you into the web-based configuration UI of the server.

This is the main page of the configuration UI. You can see the important information about the USB Server and the device(s) connected to it. The 6 links at the left-hand side each represents a function. Clicking on “Device Status” brings you back to this page, and the 5 other links take you to pages with different functions.

Network Information/Setting

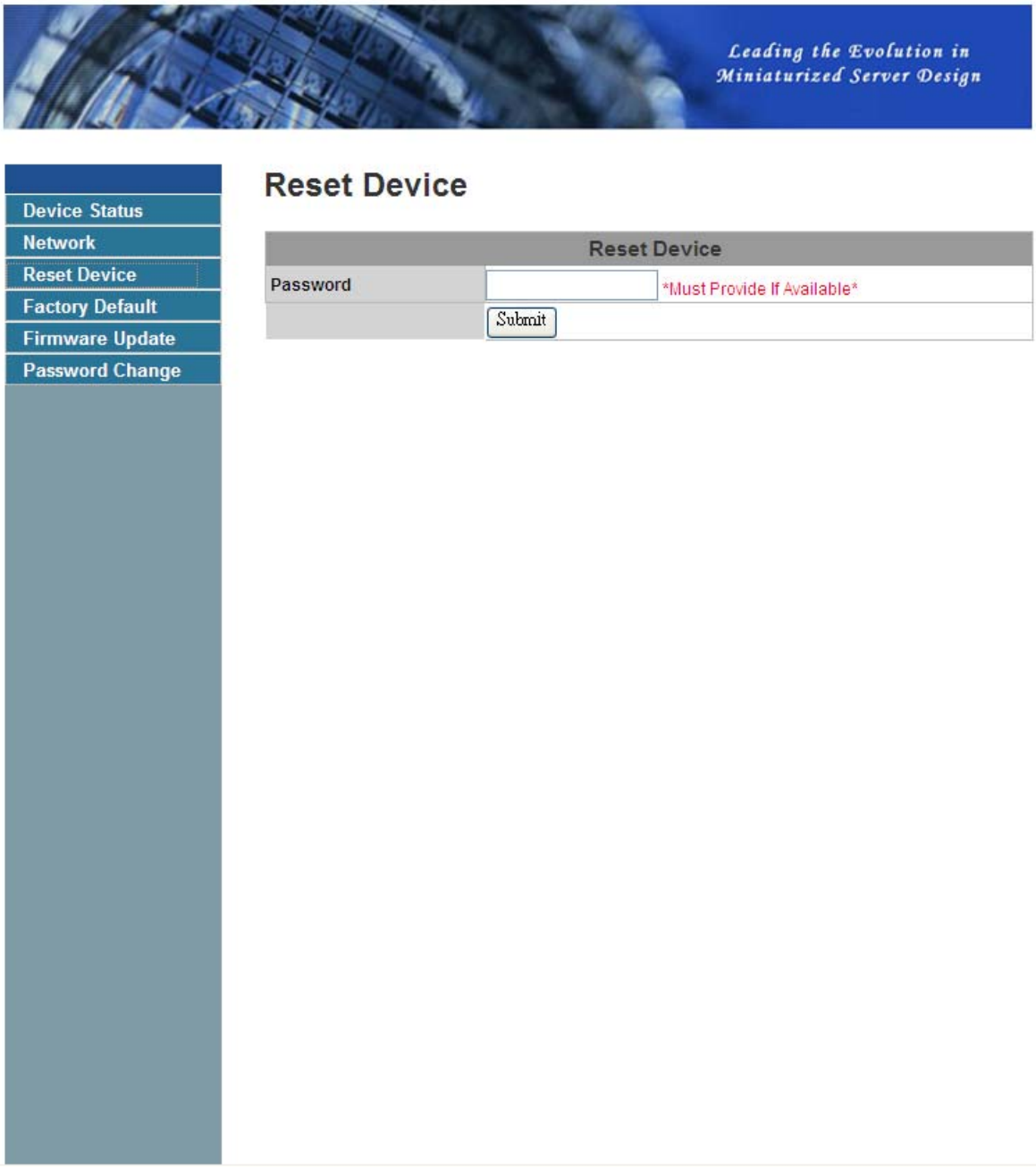


This page displays the current network setting of the server and provides links to the pages where you can perform special actions. You can change the network setting according to your need. However, please note that **if you would like to give this server a static IP, please disable the DHCP option**. Once you are done, please click on the “Submit” button and reboot the server.

NOTE: A Server with busy device(s) connected is prohibited to be configured to prevent interruption of any on-going tasks.

Server Reset

Clicking on this link takes you the page show below:



With the “Reset Server” button you can reboot the server. However, if there is a password, you must enter it for this function to work. Password is by default blank. So, unless a password is explicitly set, you do not have to enter anything for the reset function to work.

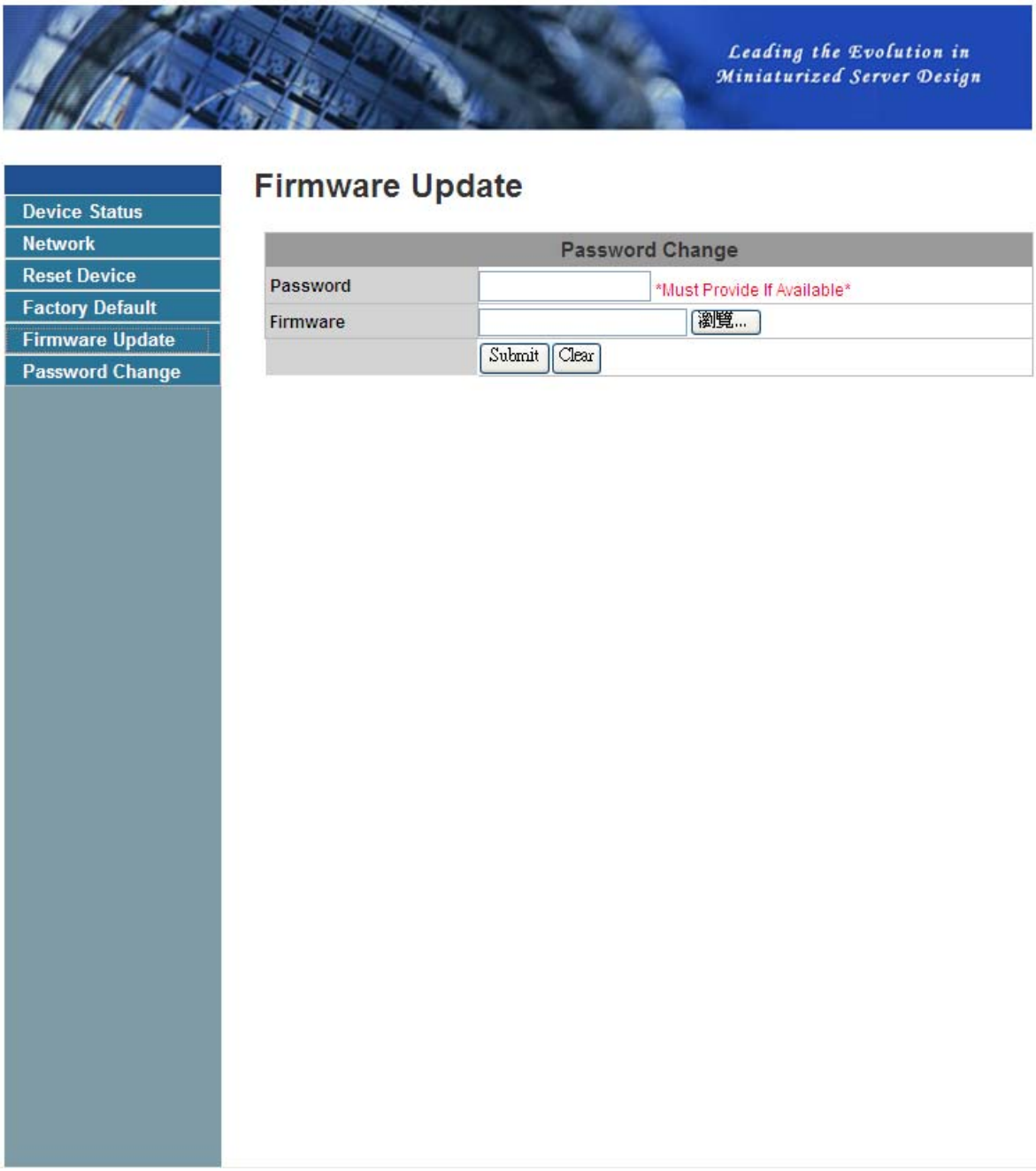
Factory Default

Clicking on this link takes you the page where you can restore the server’s settings back to default:

Again, the password is not necessary if no password is set. Just leave the field empty and click on the “Factory Default” button to restore the factory default settings.

Update Firmware

This link takes to the page where you will be able to upload the latest firmware for the server:

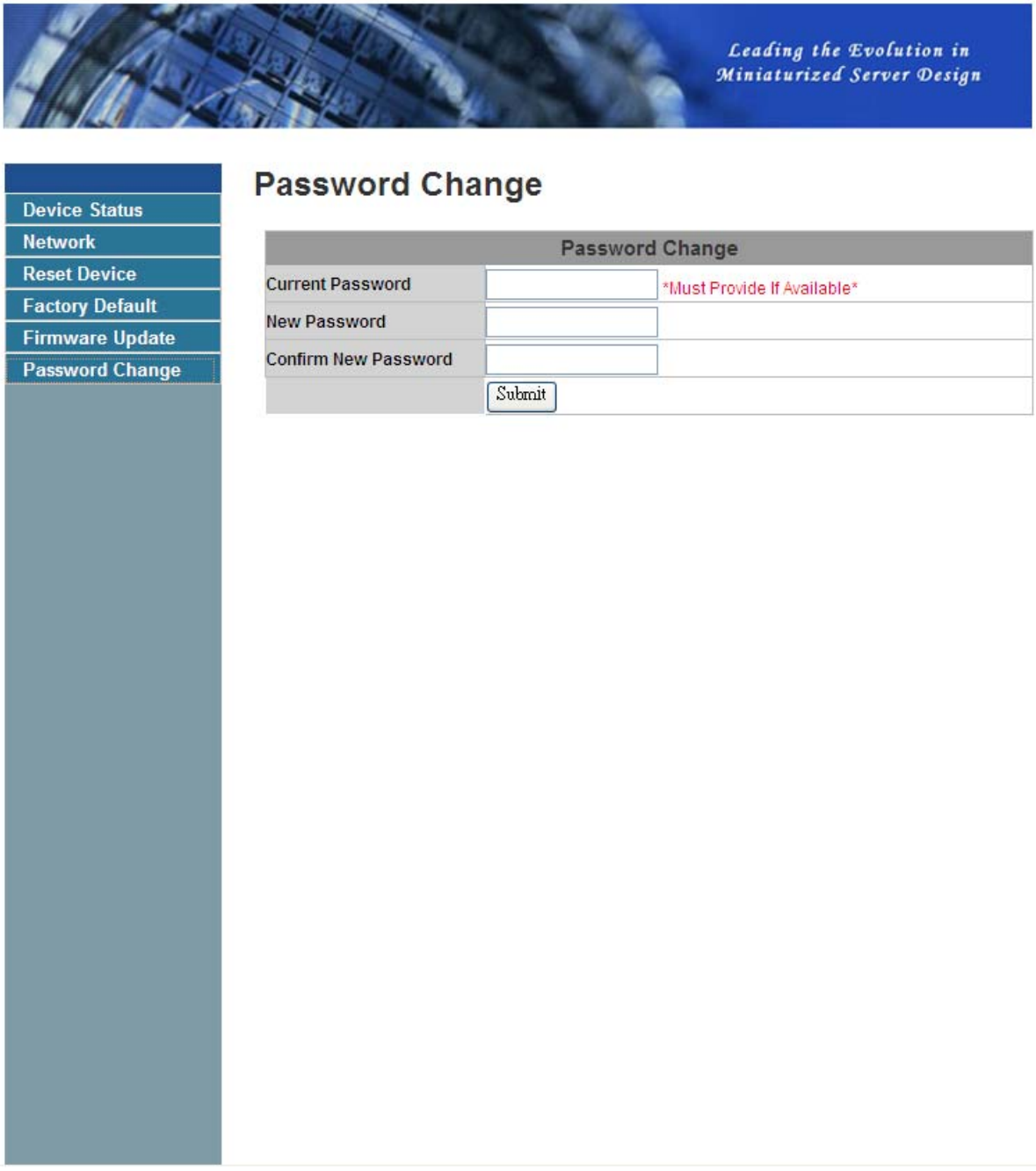


Please first click on the “Browse” button to browse to the firmware you would like to upload and then click on the “Submit” button to update the firmware. You do not need to

provide a password for this operation if there is not password set. Please just leave it blank.

Change Password

Clicking on this link takes you to the password update page below:

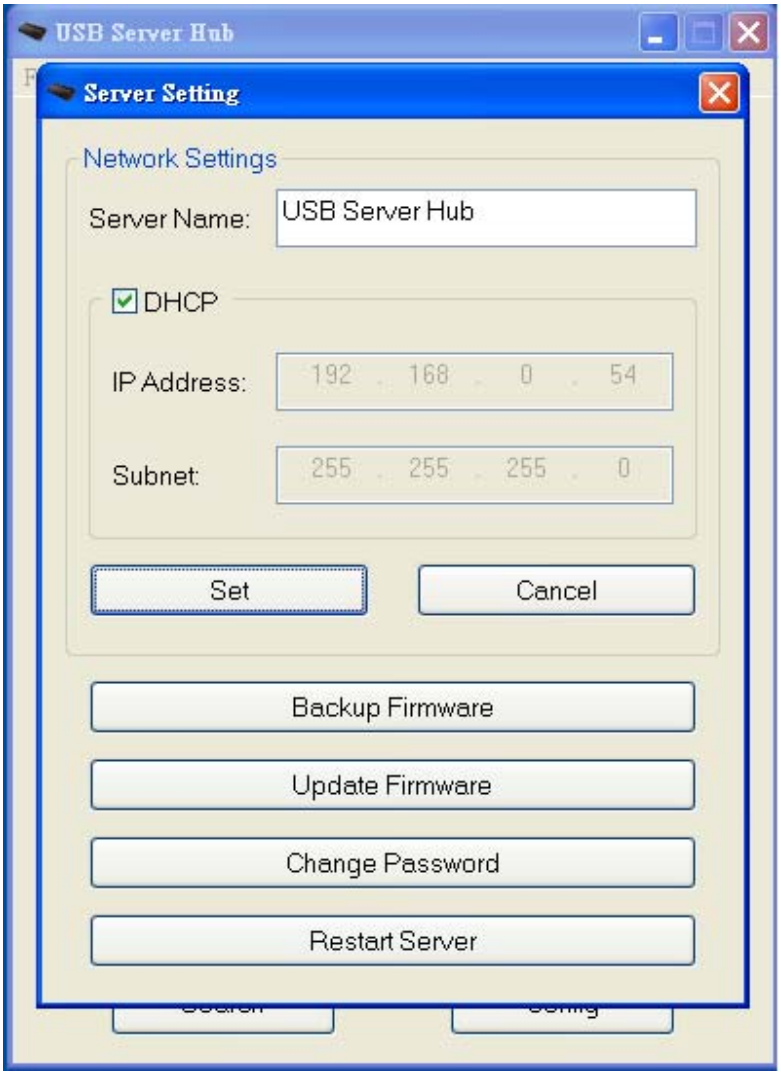


To change the password, you must enter current password, input new password and re-input new password for confirmation and then click on “Submit”. If you are setting the password for the first time, you don’t have to provide current password.

Configuration with the Utility

Another way to configure the server is via the configuration dialog of PB2. To bring up the configuration dialog, please RIGHT-CLICK on the server you would like to configure,

And select the “Setting” option. If a protective password has been set, this option brings up the following configuration dialog.

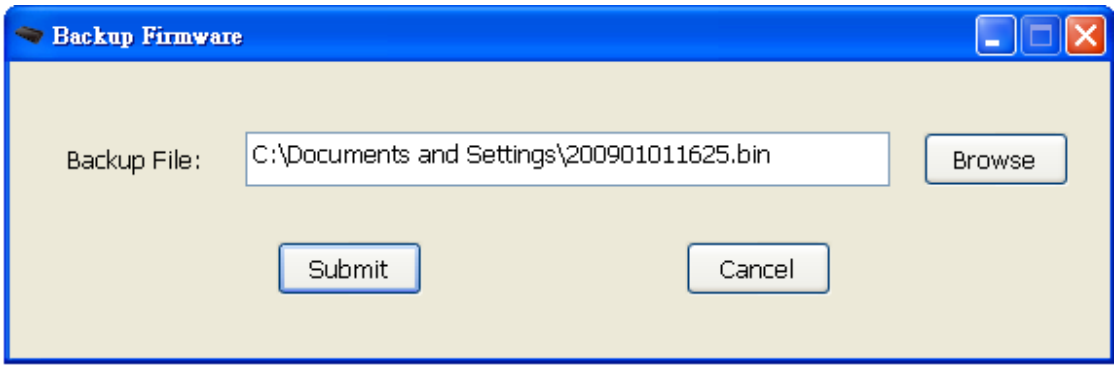


You might be prompted to enter password if a password has been set. If not, you will immediately see the above dialog.

Set Sever Name and IP Address: these fields allow you set the server name and IP address settings. If you are changing IP address, please make sure you know what you are doing.

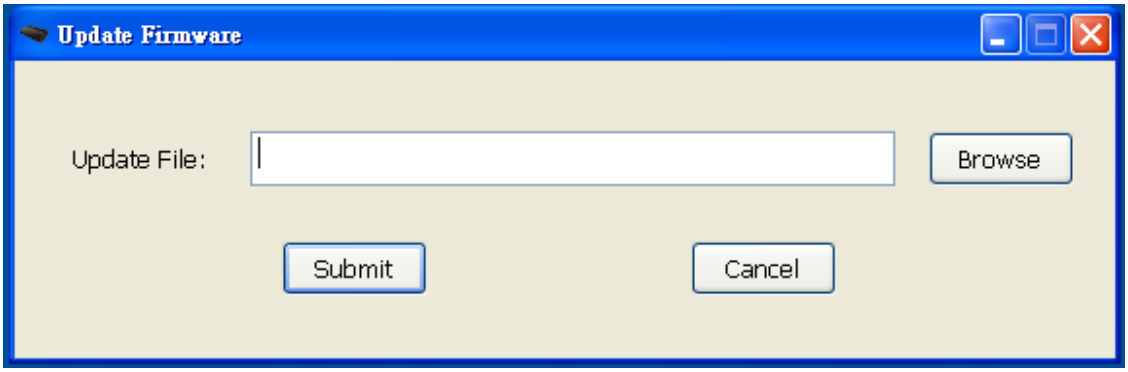
NOTE: You can apply this function to a server under different network segment.

Backup Firmware: this function is a fail-save mechanism for the Update Firmware function.



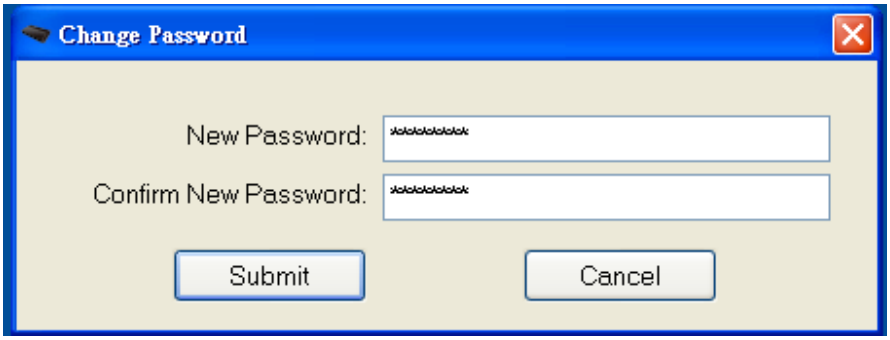
Use the **Browse** button to choose where you want to save the backup file. Click on **Submit** to start. You can backup the current firmware of your server and save it on your PC in case you updated the latest firmware and want to revert back for some reasons.

Update Firmware: update firmware with this function.



Use the **Browse** button to choose the firmware to update. Click on **Submit** to start.

Change Password: Simply enter the new password and enter it again for confirmation. Click on **Submit** to change.

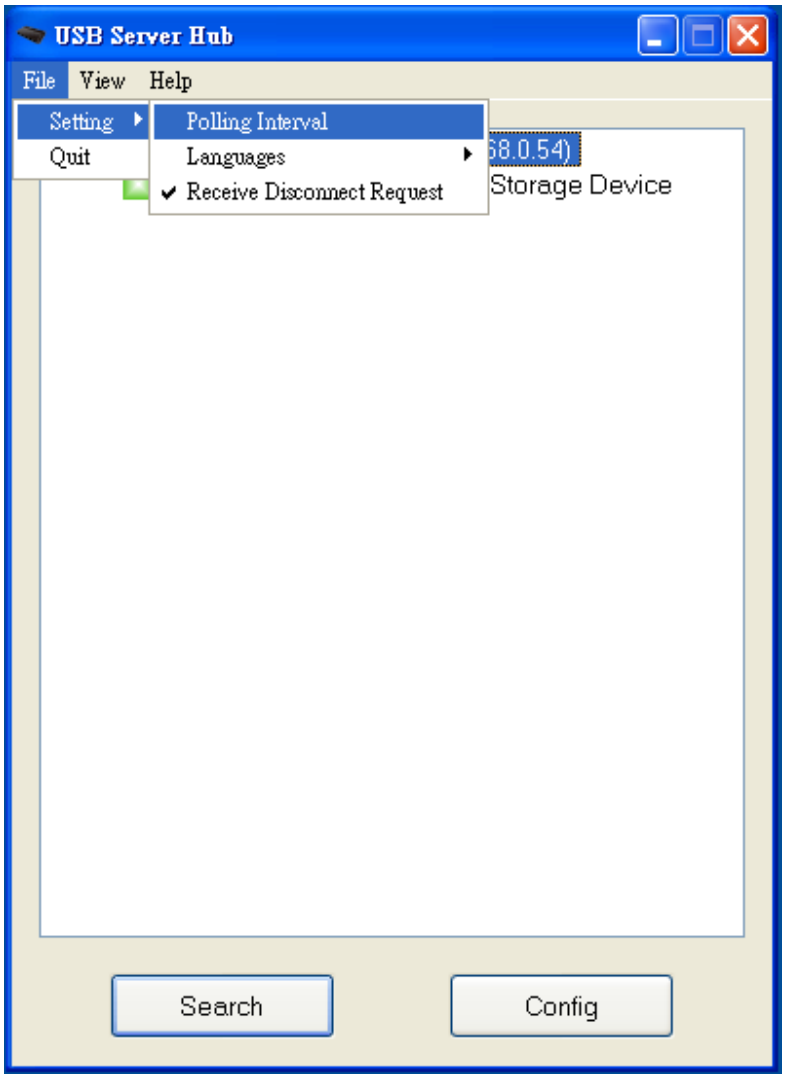


Reset Server

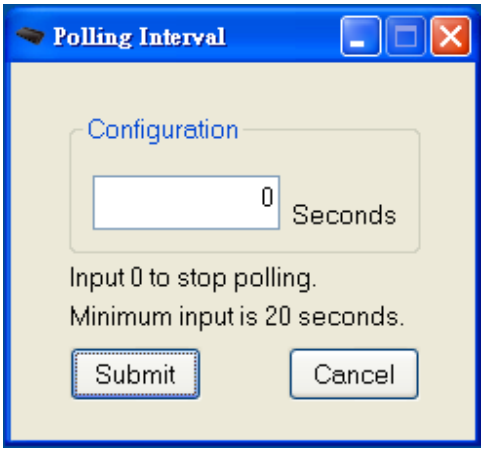
This button reboots the server. Please note that this function will not work if the server you attempt to reset has a device connected to it and the device is occupied by a user.

Polling Interval

The **USB Server Hub** program periodically polls your network to find out the status of all the connected servers and devices. Any change on the status of servers and devices will be updated to the tree view in the main dialog box. The default setting is that the program would perform this polling every 30 seconds. To change this polling interval, click on the **File -> Settings -> Polling Interval** option on the control menu:



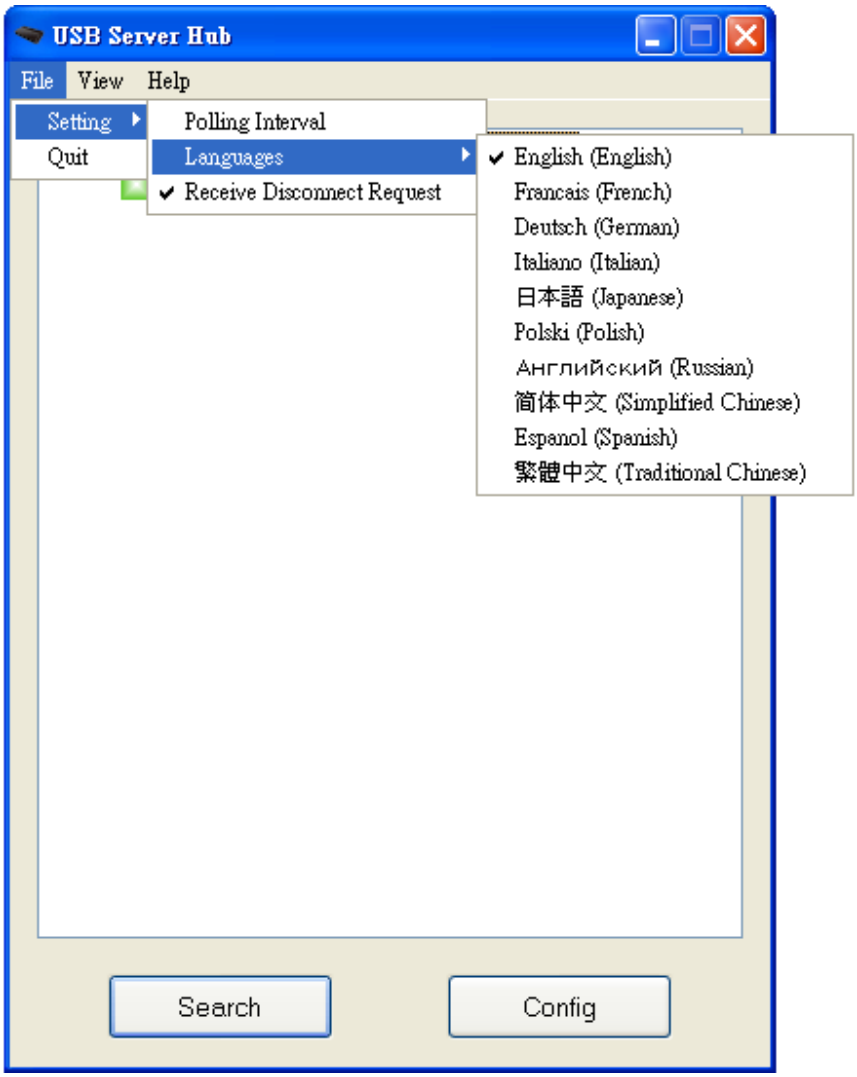
Then you should see this dialog box pops up:



As indicated on this dialog box, you must input a minimum of 20 seconds. Set it to 0 to disable this function. Click on **Submit** to allow the new interval to take effect.

Language

USB Server Hub now supports two languages: English and Traditional Chinese. To toggle between the languages, please go to File -> Settings -> Languages option and select the desired language.



Simply select the desired language to change the UI's displaying language.

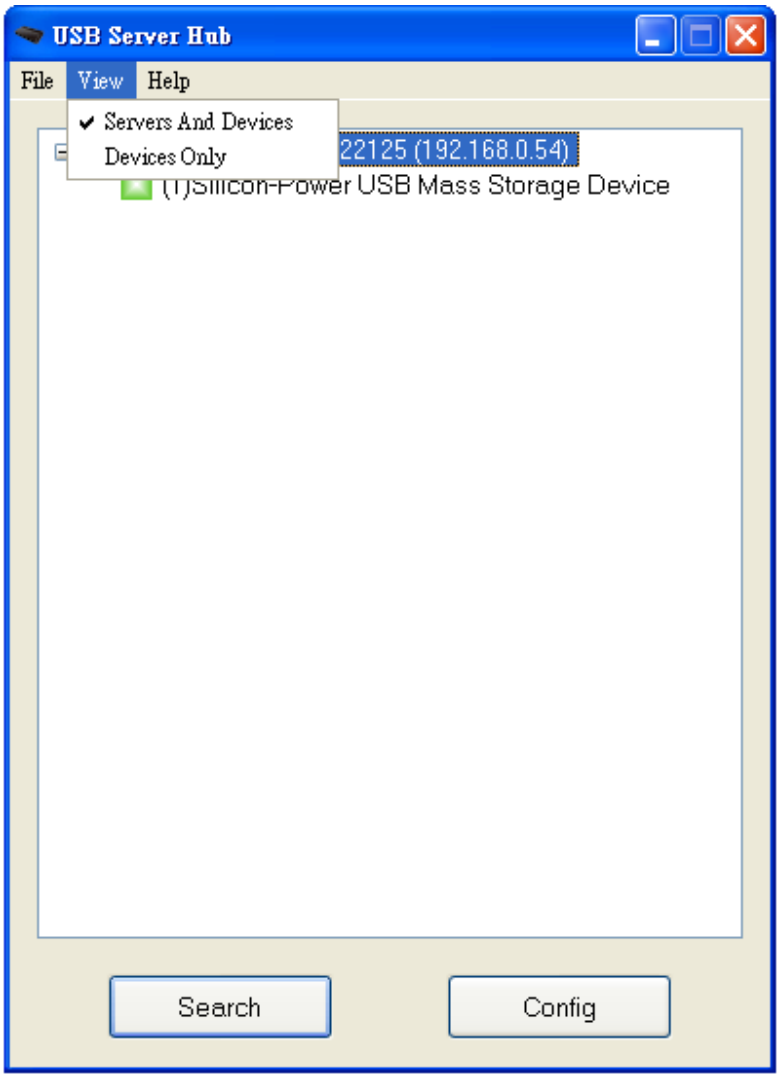
Search

When you are in need of knowing the status of all the servers and devices immediately, use the Search function:

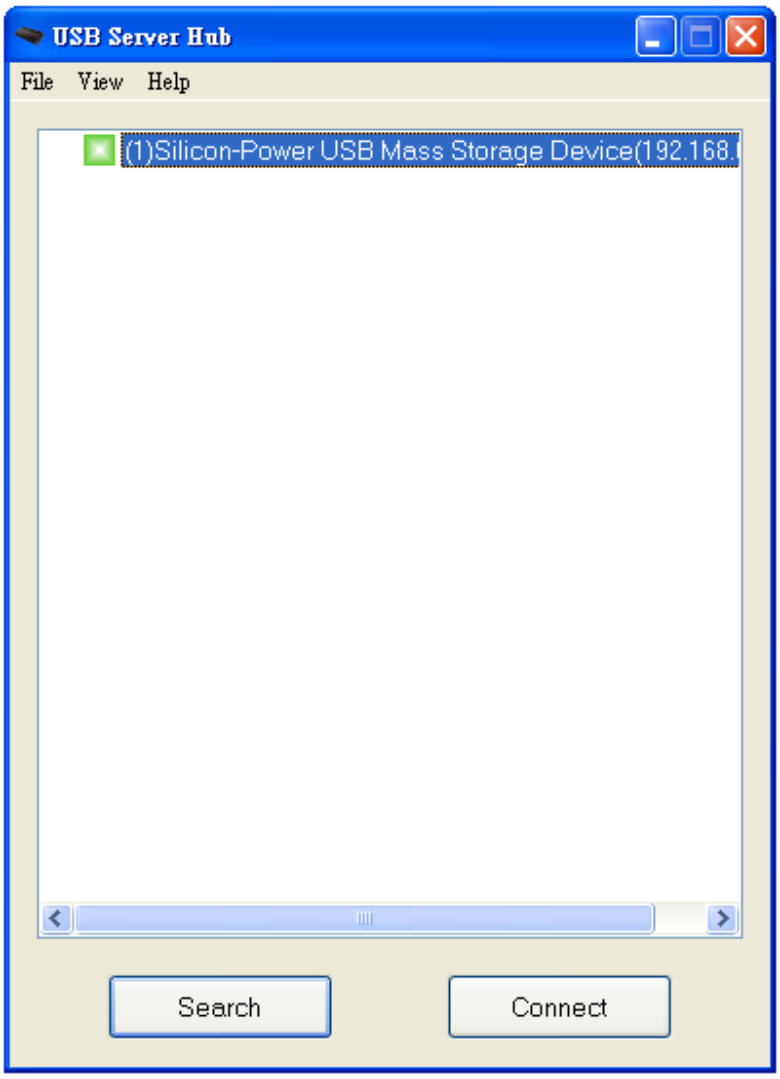
Clicking on the “Search” button triggers the program to immediately poll the network for the status of all the servers and devices. The result will be updated to the tree view.

View

The tree view in the main dialog has two display modes: “Servers and Devices” mode and “Devices Only” mode. The default setting is “Devices Only” mode. You can toggle between these two display modes with the View option on the control menu:



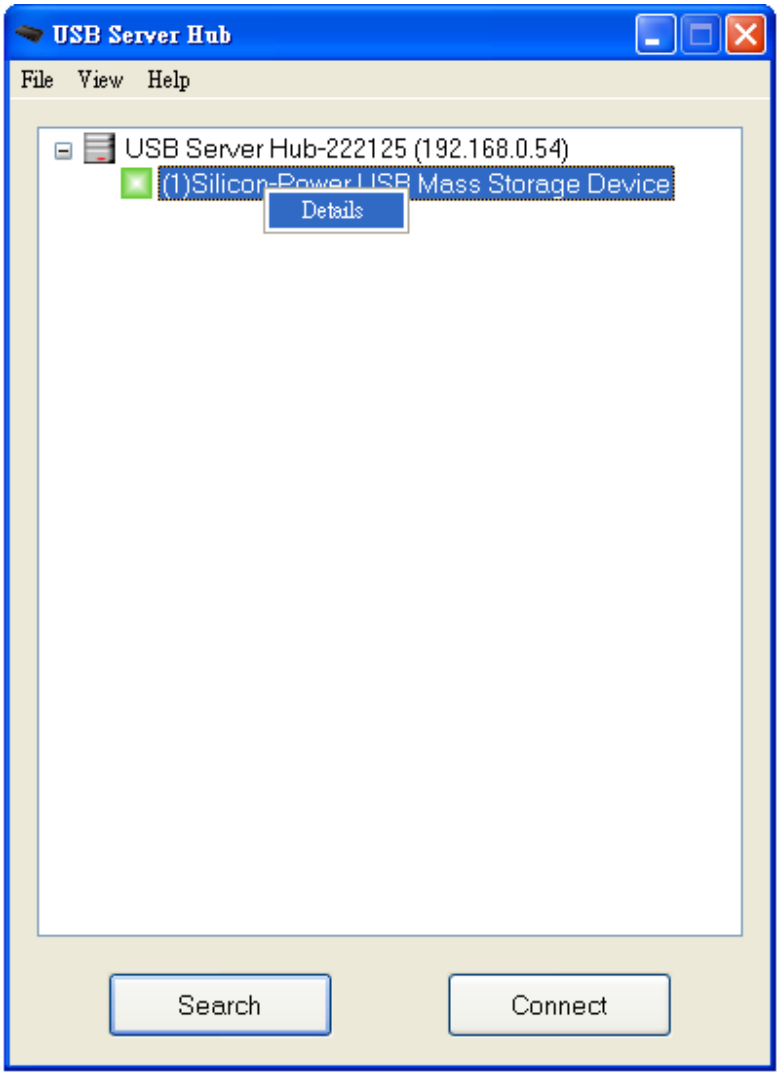
Servers and Devices view



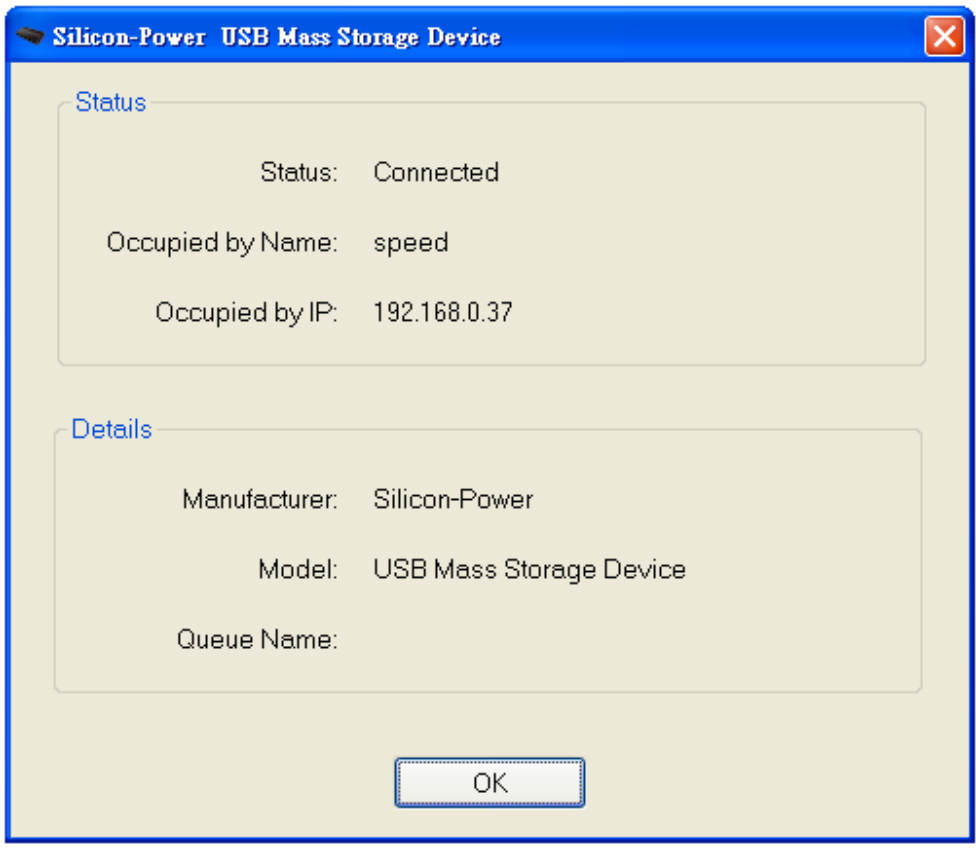
Devices Only view

Device Details

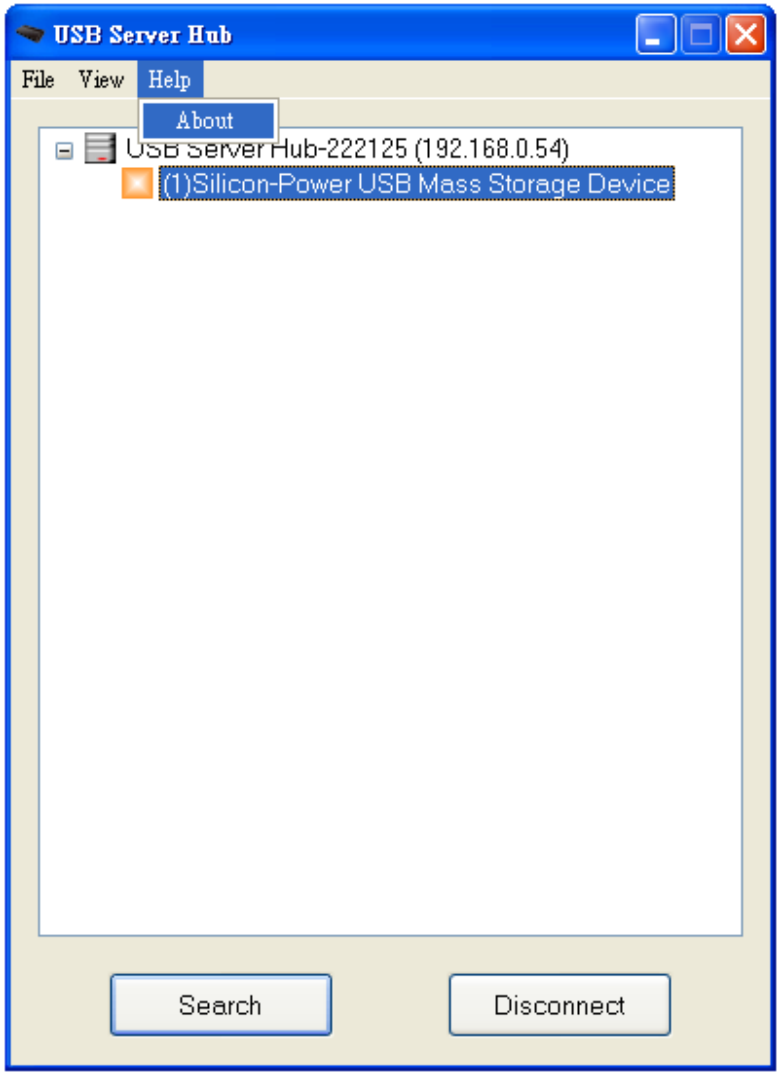
When you right click on a device on the tree view, a menu will pop up:



When you select the “Details” options, some detailed information about the selected server/device respectively will be displayed in another pop-up dialog box.


Silicon-Power USB Mass Storage Device
Status
Status: Connected
Occupied by Name: speed
Occupied by IP: 192.168.0.37
Details
Manufacturer: Silicon-Power
Model: USB Mass Storage Device
Queue Name:
OK

Help -> About



About option brings up a dialog box with legal and other relative information displayed:

Technical Support

If you have any questions that the Troubleshooting section failed to address, please visit your dealer for further help. We have Technical Support working non-stop in order to provide the best support we can for our customers.

Network Printer Wizard Quick Guide

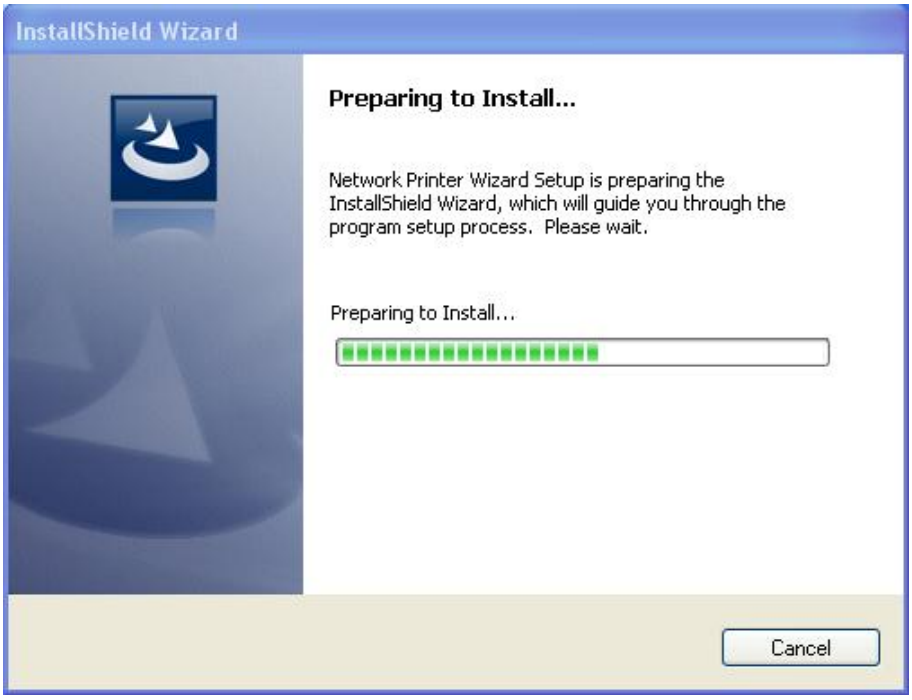
Printer Setup on Windows XP/VISTA

EST provides a straight forward and easy-to-use utility that helps you to set up USB printers connects to EST's LPR printer server as network printers, Network Printer Wizard. This utility reduces the dozens of steps in setting up network printer via Windows build-in printer setup program to a few point-and-clicks with the mouse. Users no longer need to deal with the confusing IP setting, queue name entering and port configuration.

Network Printer Wizard Installation

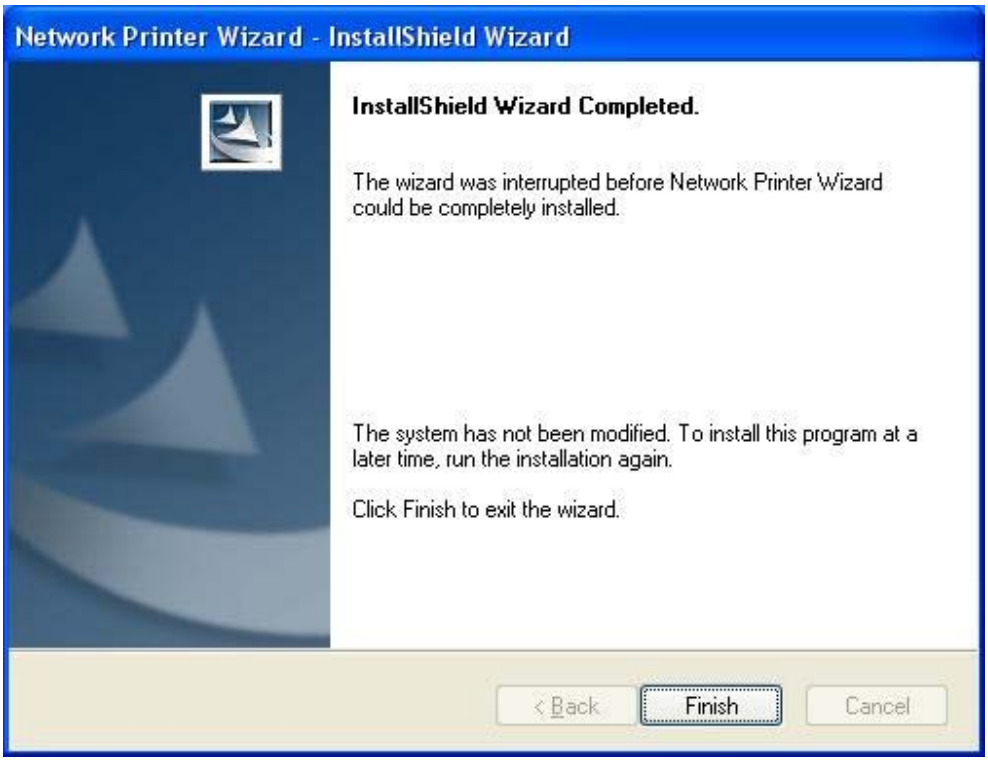
To start the installation, please double click on the installer:

Wait for the installer to run:

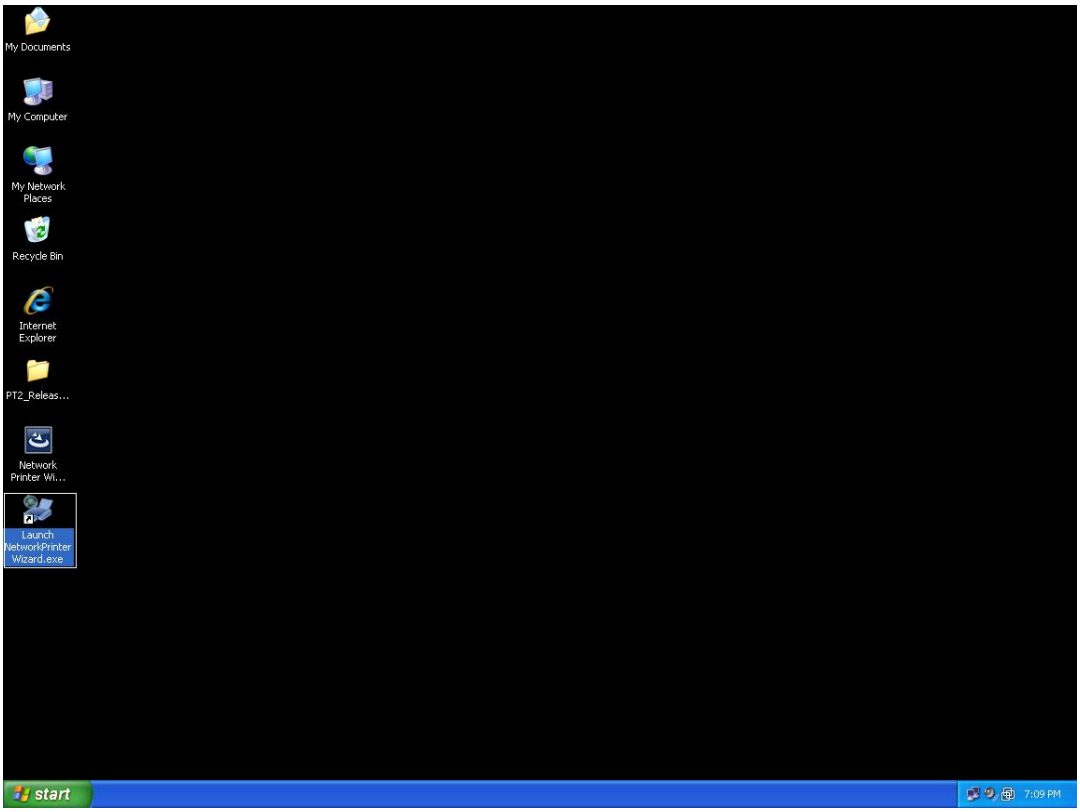


Select the installation language and click on **OK:**

Click on **Finish** to exit installer once installation completes:



The installer creates a shortcut on the Desktop for you:

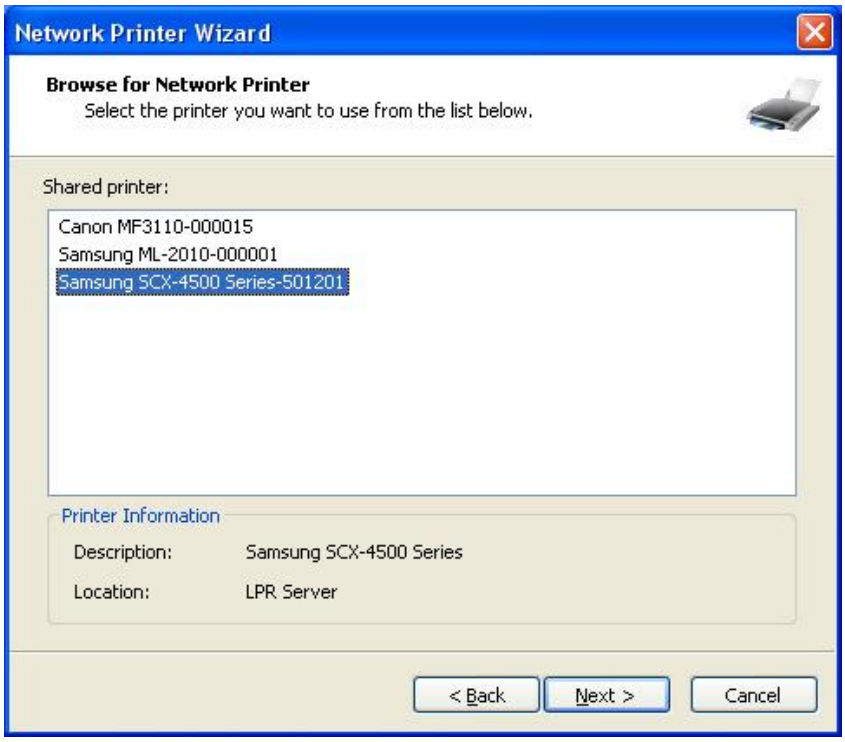


Printers Set up

1. Now we can start setting up your printer. Please click on the Launch Network Printer Wizard icon created on the desktop.

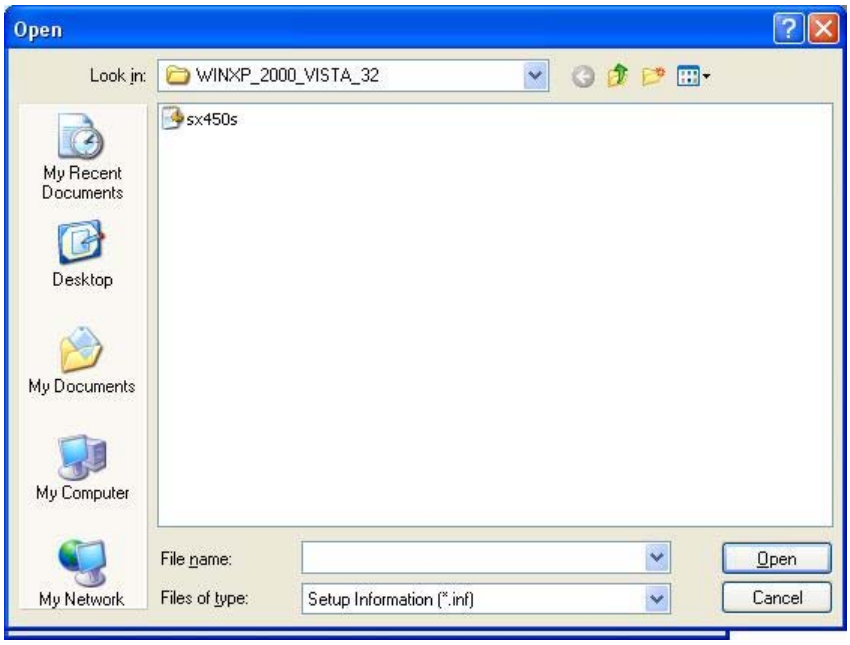
2. Please click on **Next** to continue when you see this welcome dialog box.

3. Please select the printer you would like to setup on this list and then Click on **Next**. The number of printers you see on this list depends on the number of printers that are connected to your network. If you only have one printer on the network, you see only one printer on this list. **If you don't see any printers, please make sure your printers and LPR Printer Server is correctly powered on and connected to the network.**



4. On the next dialog box, please select the driver form the list if it's there, and then click on the **Next** button and go to **step 7**. Else, read on.
   If you can't find the target printer's driver on the list, please insert the disk containing the printer's driver, click on **Have Disk…** button then go to step 5.

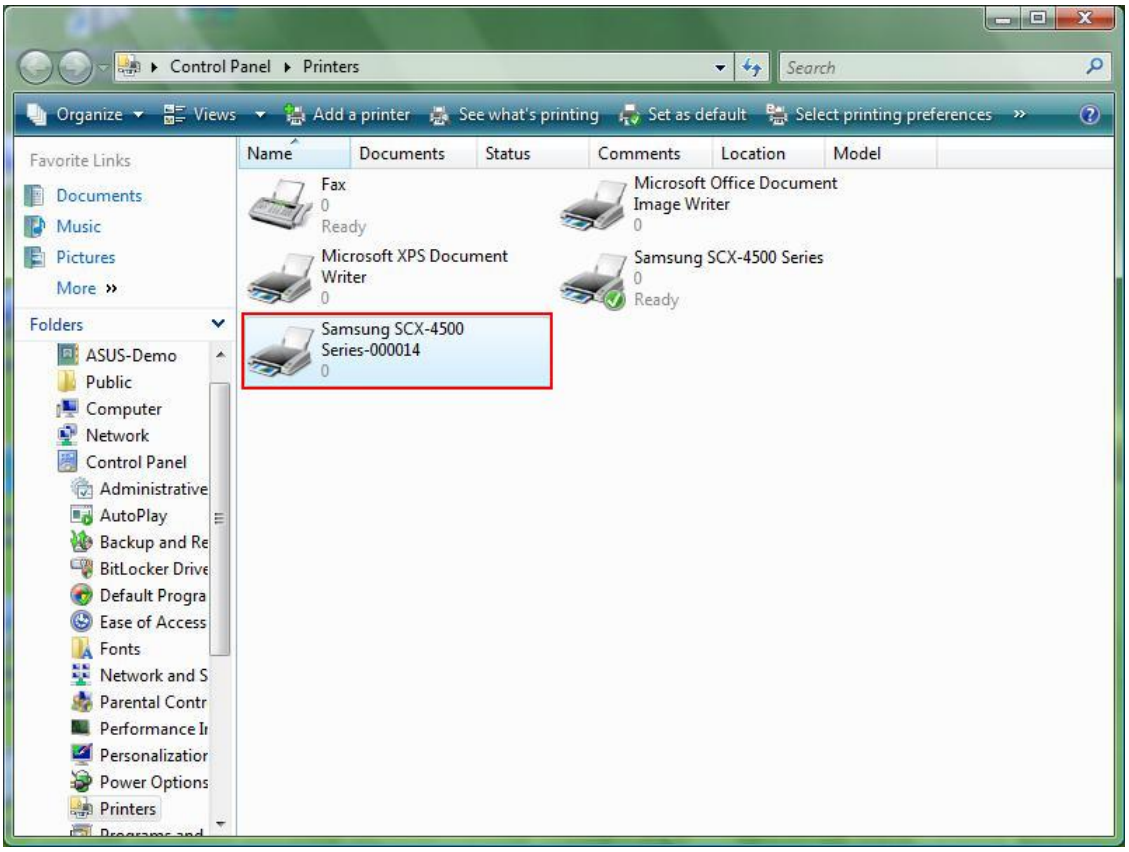
5. You must browse to the folder that contains the driver for your printer and click on **OPEN** to use it:



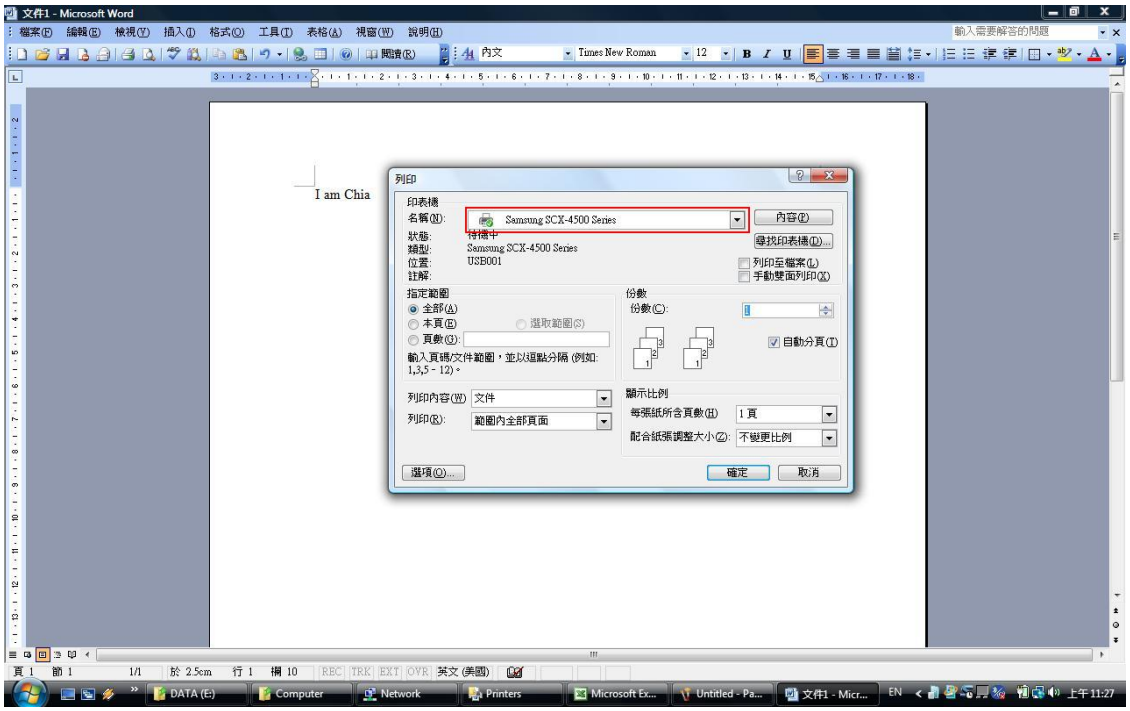
6. Then, select the driver from the list again and then click on the **Next** button. If you didn't select the correct driver, here is the chance for you to verify. Please click on **Have Disk** again to re-select.

7. Once you have selected the correct driver from the list, please click on **Finish** button. The wizard might take a minute to setup the network printer for you.

8. After the printer has been setup correctly, you can see it under **Control Panel > Printers**:



Now you can print any document using the printer you just setup:

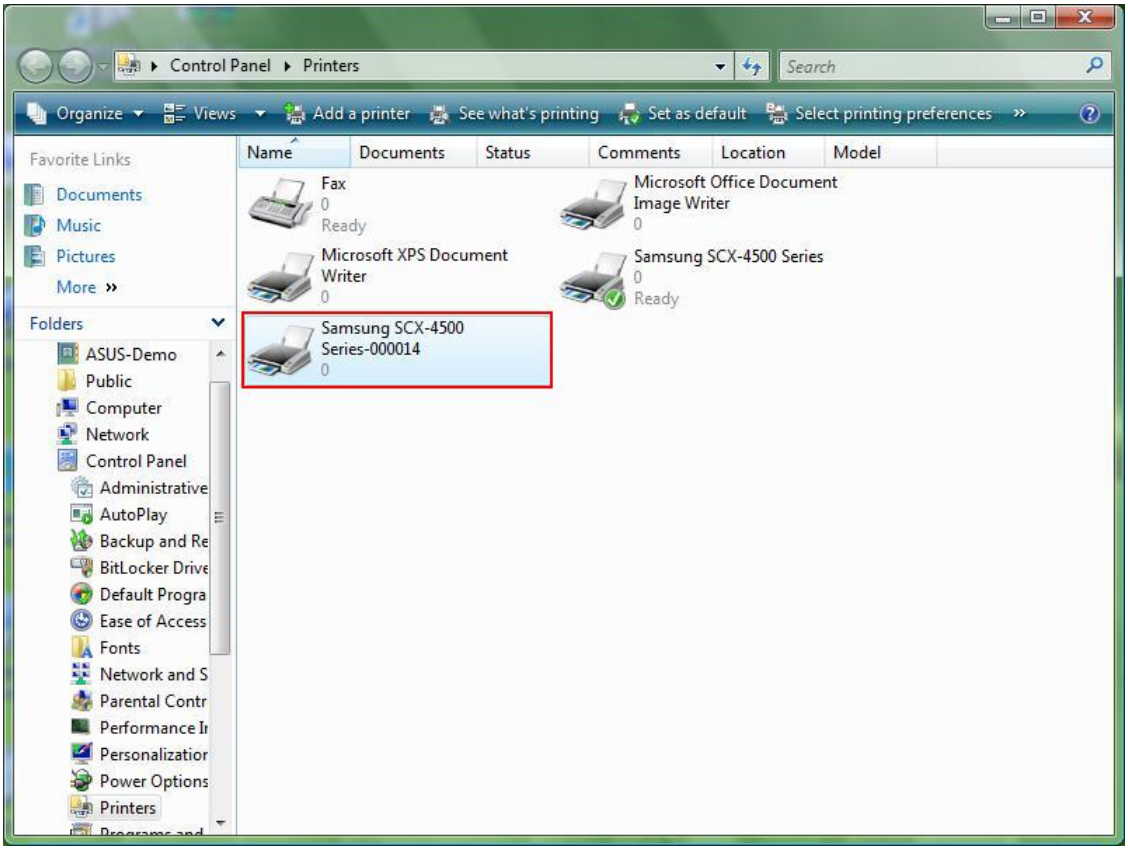


If you have more than one printer set up, please make sure you have selected the correct printer to print.

NOTE: REMEMBER, THIS SETUP IS A ONE-TIME THING. YOU DO NOT HAVE TO RUN THIS PROCESS EVERY TIME YOU WANT TO PRINT. HOWEVER, OF COURSE, IF YOU REMOVE THE NETWORK PRINTER WIZARD PROGRAM, YOUR PRINTER SETUP WILL NO LONGER WORK.

Remove the Printer Setting

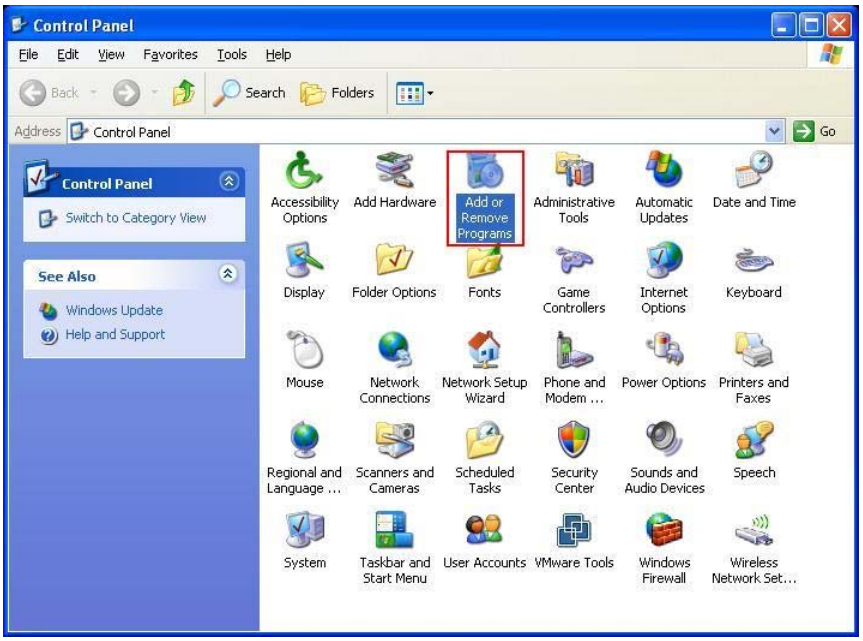
To remove the printer setup, please go to the **Control Panel > Printers** dialog box and remove the printer entry from it.



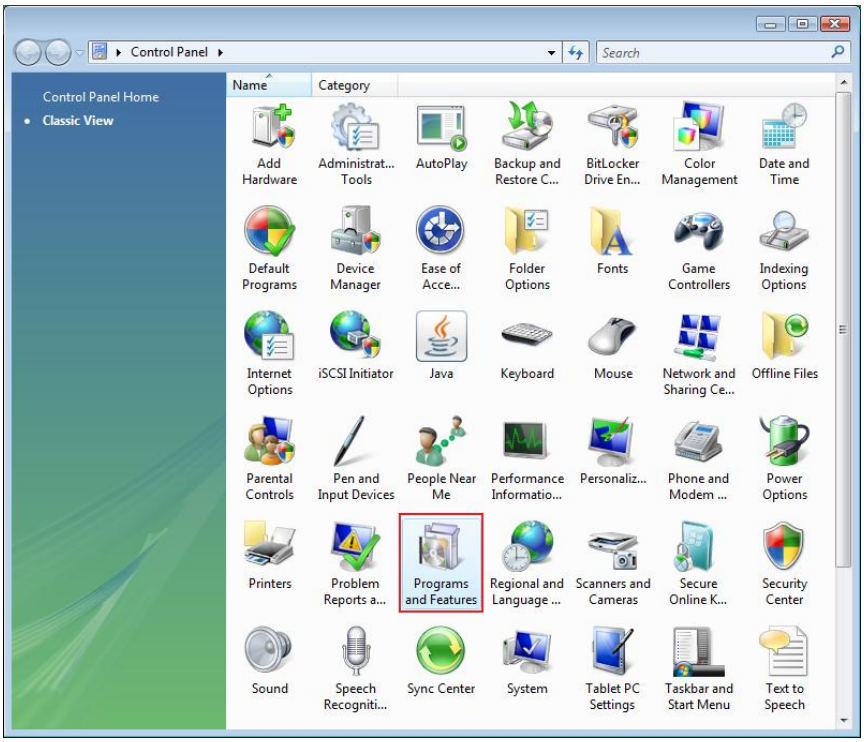
Simply **Delete** this icon by pressing **Del** key on your keyboard. Then it will be removed from the list of usable printers when you print document.

Remove the Program

To remove the Network Printer Wizard program, please go to the **Control Panel > Add or Remove Programs** (**Programs and Features** on Windows VISTA)

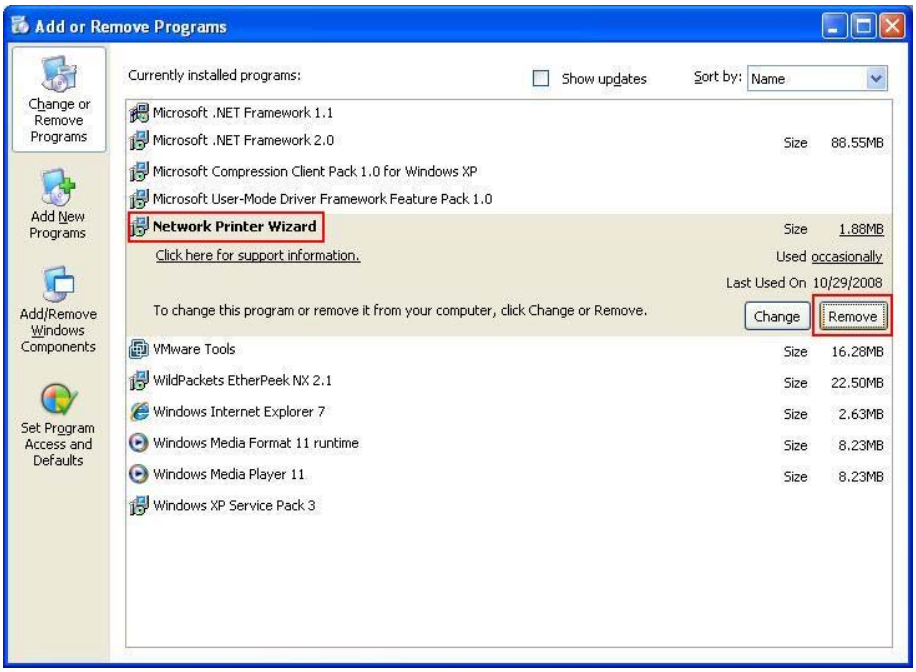


Window XP

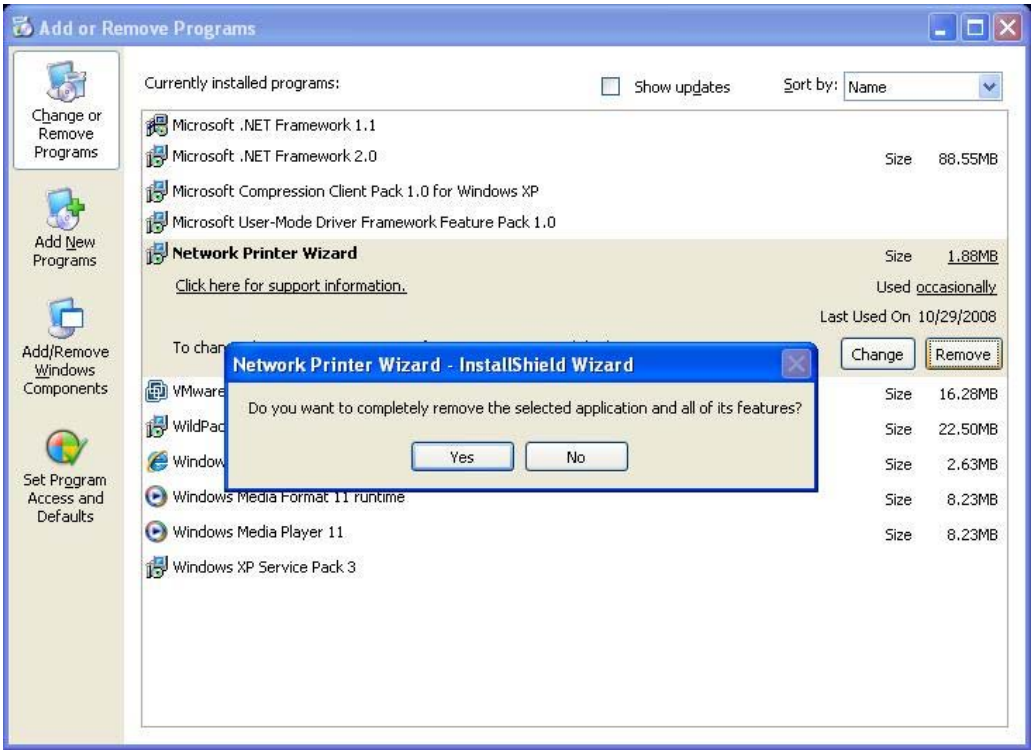


Windows VISTA

Then select to remove the program



Then follow the instructions of the installer complete the removing process:



PLEASE NOTE: Once you remove this problem, you will no longer be able to print using the printers you setup with Network Printer Wizard

Disclaimer

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FCC Statement

This device generates and uses radio frequency and may cause interference to radio and television reception if not installed and used properly. This has been tested and found to comply with the limits of a Class B computing device in accordance with the specifications in Part 15 of the FCC Rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by plugging the device in and out, the user can try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the computer into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.