

COM Port Redirector User Manual

English Version 1.1

June 14, 2006



Revision History

Revision Date	Document Version	Pages	Description
May 25, 2006	1.0	All	Initial release by jhkim
June 14, 2006	1.1	3 All	Modified supported hardware Style / font fix

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COM Port Redirector

1. Redirector Introduction

Redirector is a network COM port driver, enabling serial ports of device servers to operate the same way as the local COM ports of PC.

Upto 255 COM ports can be registered in one PC if Redirector is used.

1) Supported Hardware

- Portbase Series
- WiComm-2
- Eddy Series
- Weddy Series

2) Supported Operating Systems

- COM Port Redirector for Windows 98/ME
- COM Port Redirector for Windows 2000/XP/2003

3) System Requirements

PC system requirement for running Redirector is as follows.

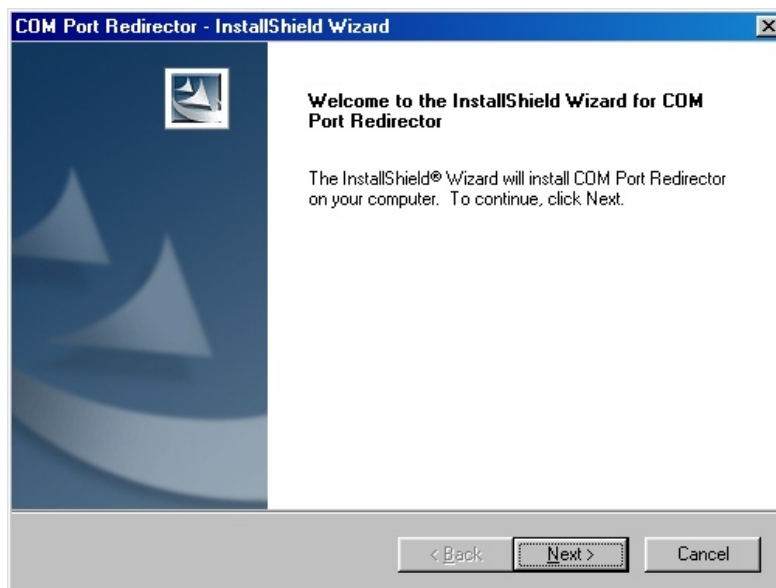
- CPU : Pentium 100 MHz or higher
- Memory : 16 Mb or more
- CD-ROM : Faster than 4X
- Network : 10M Ethernet or higher

2. Installing Redirector

Before installing Redirector, operation environment setting needs to be done for the device server.

1) Installing under Windows 98/ME

- 1) Insert the device server's CD into the PC to install Redirector in.
- 2) Upon insertion, the setup program will auto-start. Select "**English**".
- 3) On the option screen, select "**Install Redirector (WIN98/ME)**". Then Redirector installer will be started automatically.

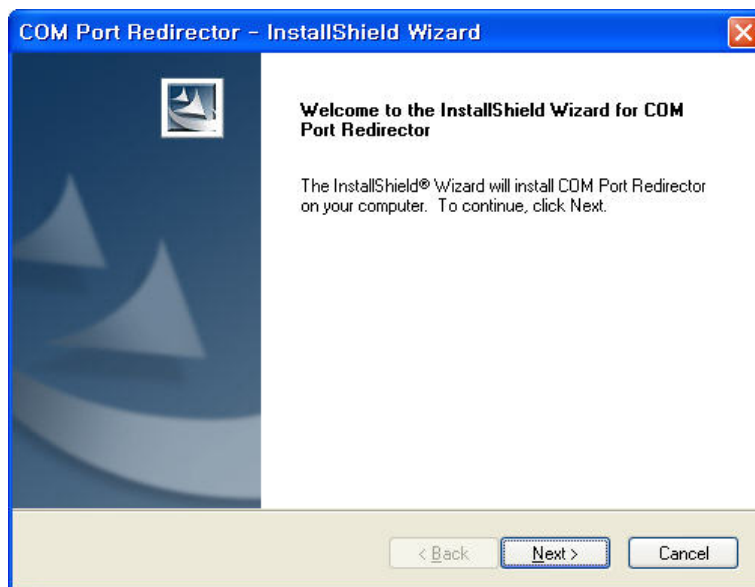


- 4) Follow the instructions from the installer. When Redirector is run after installation, Redirector Manager icon will appear in the system tray.

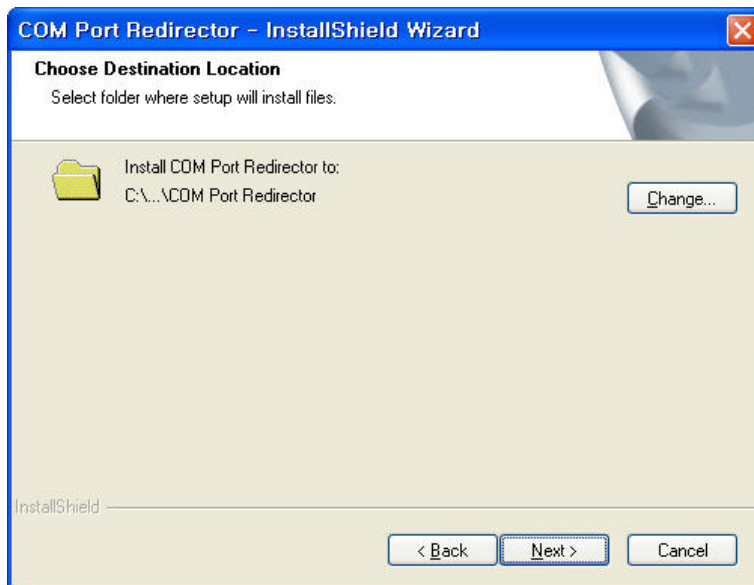


2) Installing under Windows 2000/XP

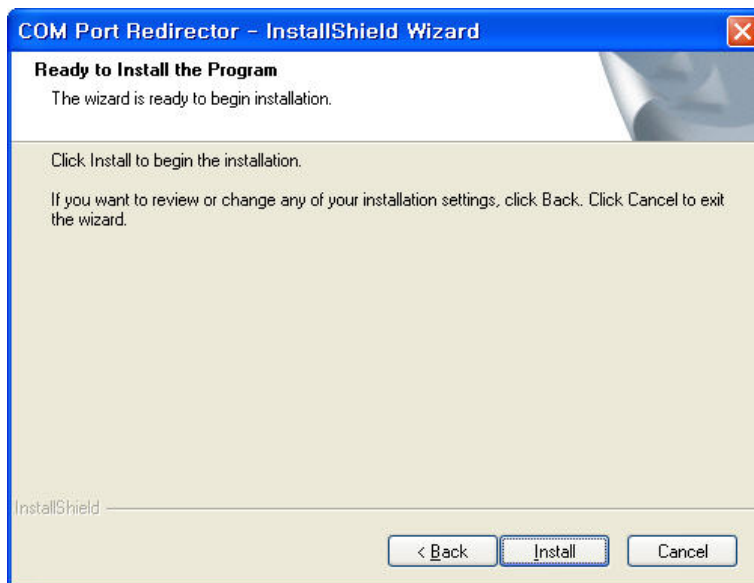
- 1) Insert the device server's CD into the PC to install Redirector in.
- 2) Upon insertion, the setup program will auto-start. Select **"English"**.
- 3) If you select **"Install Redirector for WIN2K/XP"**, the Install Wizard for COM Port Redirector will appear on the screen automatically.



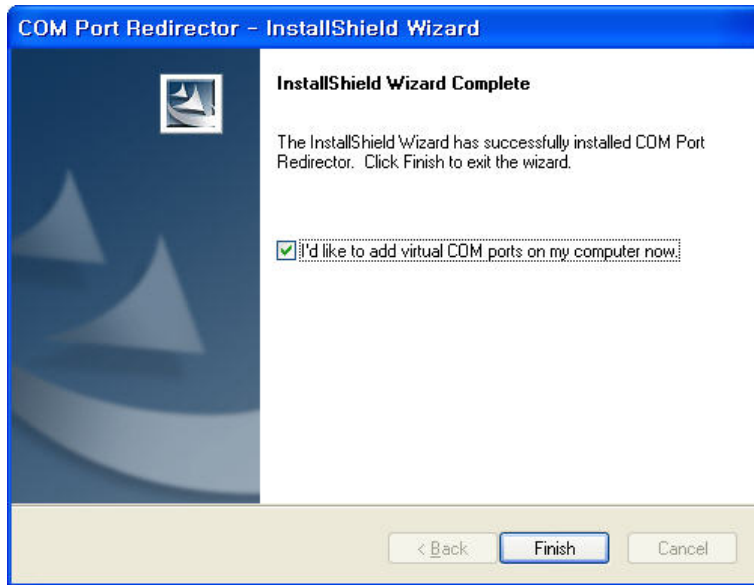
- 4) Click "Next"



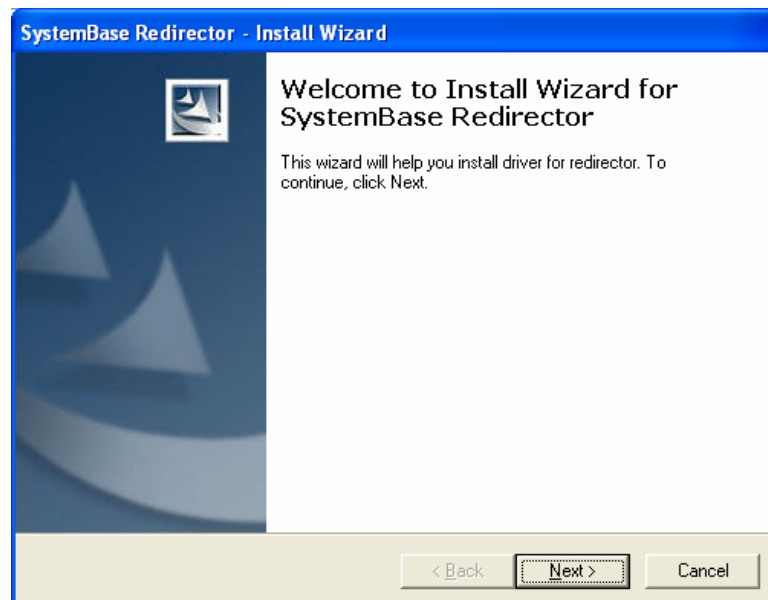
5) Choose destination location and click "Next".



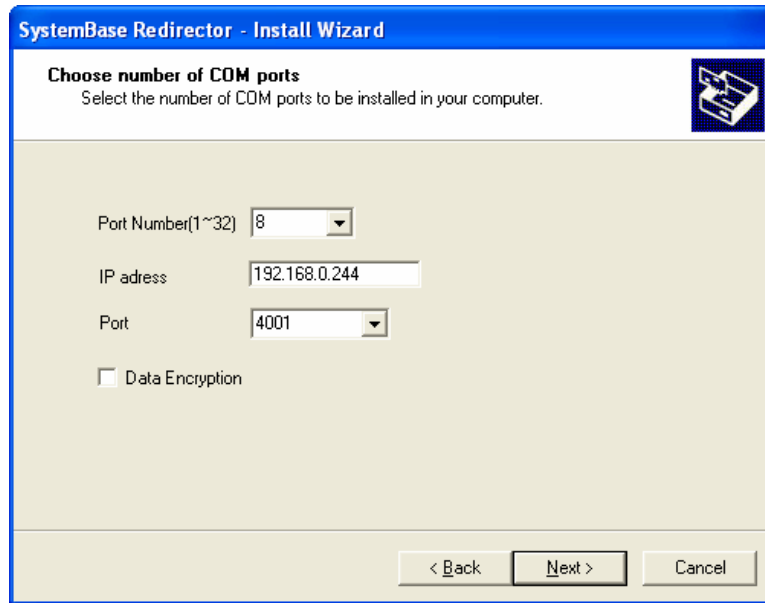
6) Click "Install" to begin the installation.



- 7) When the installation is complete, you can either add virtual COM ports right away or later. If you want to add ports right away, check the option “I’d like to add virtual COM ports on my computer now” and click “Finish”. Then the port installer will start.



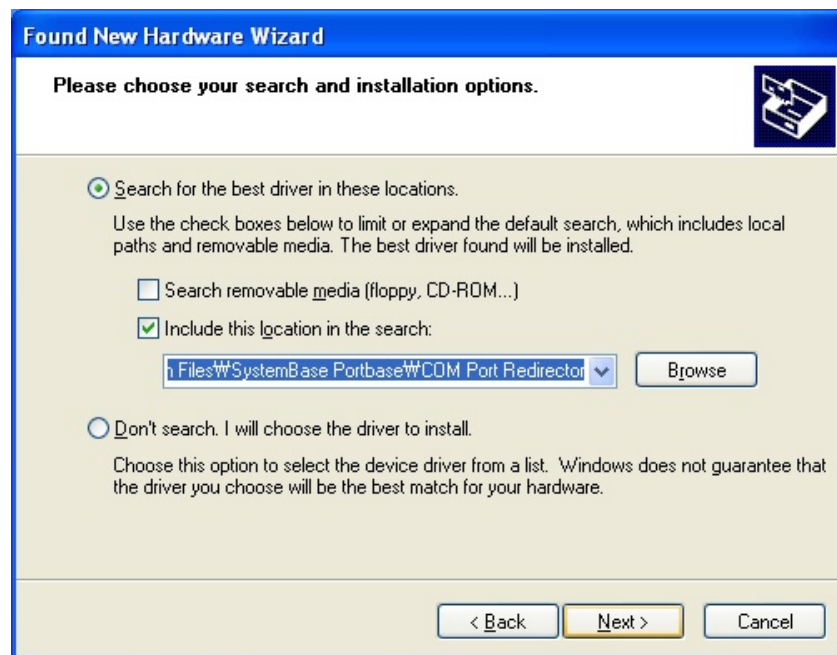
- 8) When the Install Wizard runs, click “Next”



- 9) Select how many COM ports you'd like to install and insert the IP address of the device server that virtual ports will be connected to. Finally, assign the port number that the first COM port will connect to, and click "Next". When multiple ports are installed, port numbers are assigned following the first port. Available port numbers are between 4001 and 4032, and port numbers can be modified after the installation as well. Using the Install Wizard, up to 32 COM ports can be installed at once.



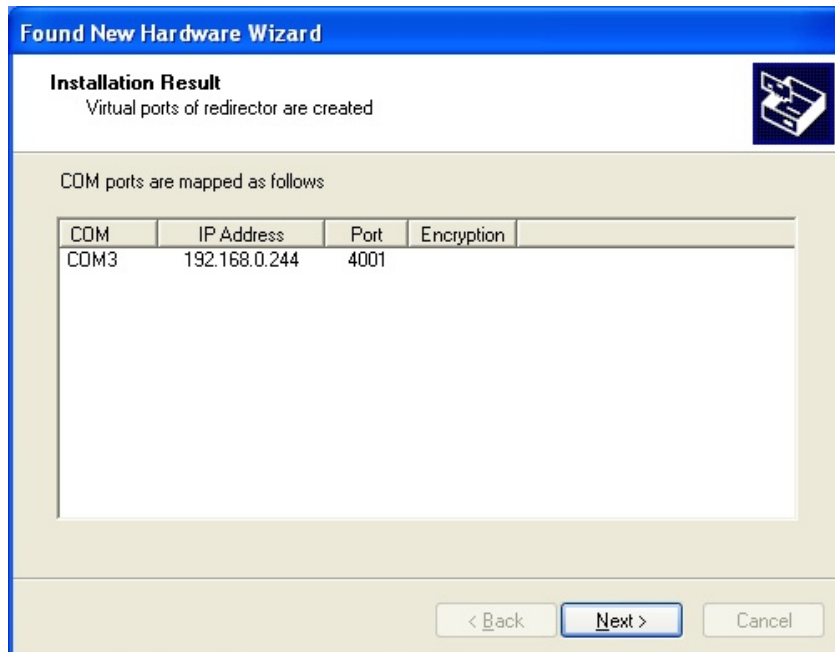
- 10) Windows XP or Windows 2003 Server Edition asks for the location of the driver while installing. Windows 2000 skips this process and installs automatically, so skip to step 14).



- 11) Select "Search for the best driver in these locations." and check "Include this location in the search." Click "Browse" to assign the location of your COM Port Redirector. The default location is "C:\Program Files\SystemBase Portbase\COM Port Redirector". Click "Next".
- 12) Warning on the Windows compatibility test might be displayed. Just click "Continue" for installation. Your system will not be affected by any means.

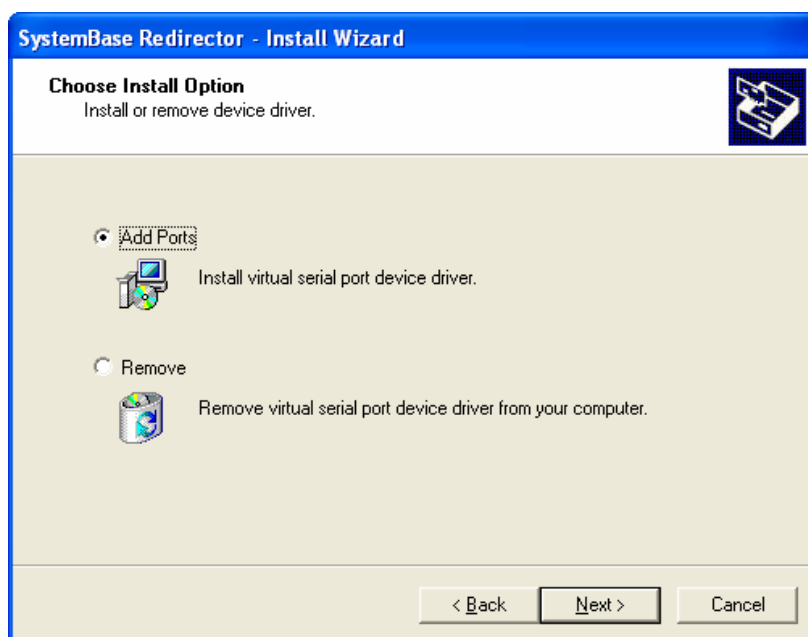


- 13) Click "Finish" to complete port installation, and this process will repeat until all ports are installed.



- 14) After the installation of the last port, the Installation Result window is displayed. Installation process is completed when you click "Next".
- The Installation Result window shows the list of installed COM ports and the IP address and port number of the device server.

- If you want to install additional COM ports later on, you need to run the installation wizard again. Run 'Start' → 'All Programs' → 'SystemBase Portbase' → 'COM Port Redirector' → 'Add or Remove Ports'. When the wizard detects existing ports installed, the following screen shows up.
- When you select "Remove" option, all virtual ports will be removed. Be careful when selecting this option.

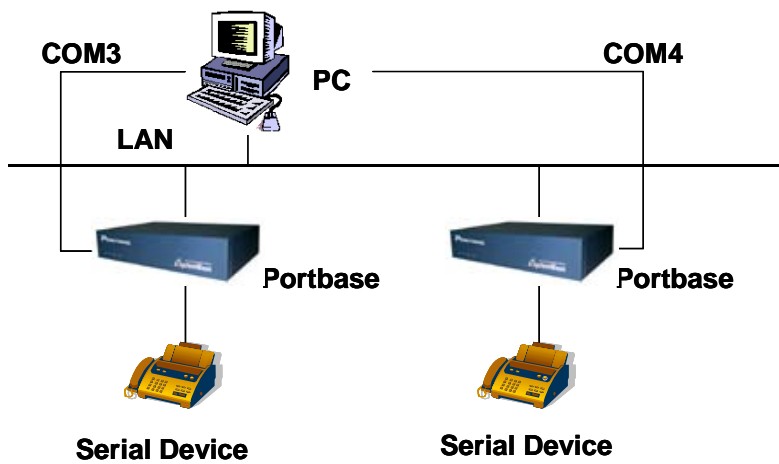


Choose "Add Ports" if you want to install additional COM ports.
The remaining steps are identical to installing new ports.

3. Using Redirector

With COM Port Redirector, you can use serial ports in the device server from the remote site as if they belong to your own PC. These ports operate just like COMx console ports in your PC.

The following figure describes how the communication between the PC with Redirector installed and the serial devices attached to the device server is done via network.

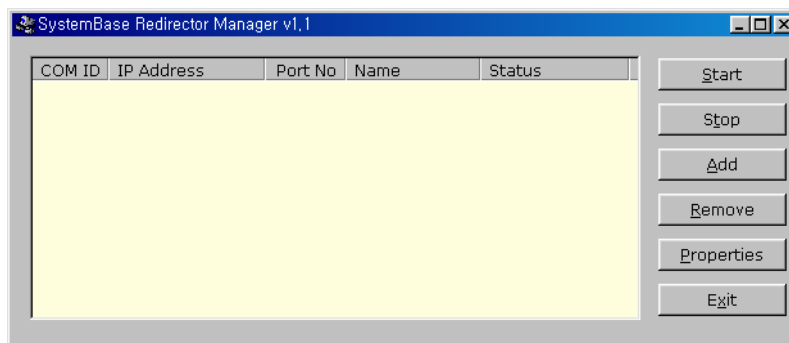


1) Using Redirector in Windows 98/ME

1) Configure Redirector

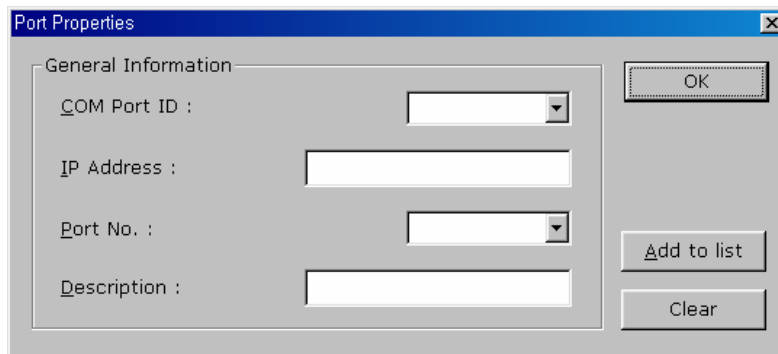


To run the Redirector Manager, double-click the Redirector Manager icon from the system tray, or select Start → Program → SystemBase Portbase → Redirector.



2) Register COM ports.

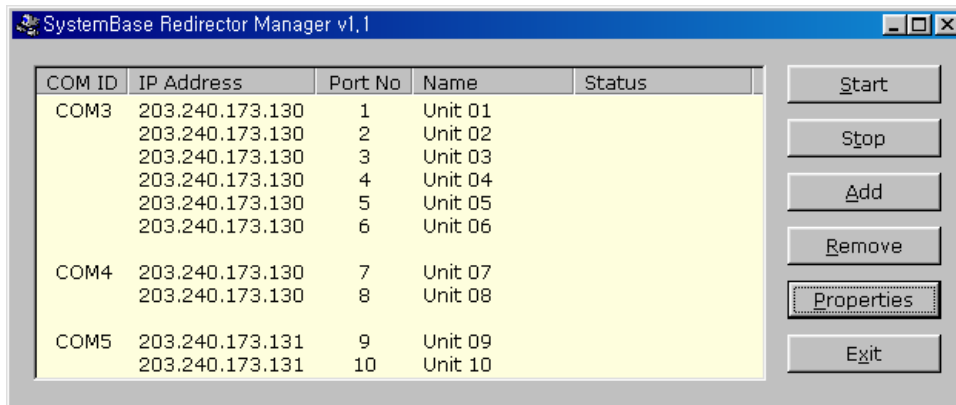
- When you click “Add” from the main menu, general information about the COM ports to install will be displayed



- Enter the COM Port ID(COMx), IP address of the device server, Port Number (1 to the maximum number of ports), and the description or the port name (16 bytes maximum).

- Multiple IP addresses and port numbers can be registered to one COM port.

- When all the information is provided, you can click “OK” to add a new port, shown in the next figure.



- Nothing is displayed under the Status tab if the Redirector service did not start for each port.

- By repeating the steps shown above, multiple serial ports can be registered as a candidate for connecting to one COM port.

- If you like to remove a port, click on the port to remove and click “Remove”.

3) Starting / Stopping the Service

From the Redirector Manager main screen, select ports to start Redirector service.

- ◆ Selected ports will be highlighted.
- ◆ Click one more time to unselect any selected port.
- ◆ Only one serial port for each COM port can be selected.
- ◆ After selecting all the ports desired, click “Start” to activate the Redirector service.
- ◆ Certain information will be displayed for Status tab once the service is activated for ports.
- ◆ The list of conditions to be displayed for Status tab is as follows.

- Ready** : Virtual serial port is set by Redirector on the PC, and is waiting.
- Connecting** : The connection between the device server and the virtual serial port set by Redirector on the PC is on processing.
- Connected** : The connection between the device server and the virtual serial port set by Redirector on the PC is established.
- Disconnected** : The connection between the device server and the serial port in the PC is lost.
- COM Opened** : Device server doesn't operate even though the serial port in the PC is open.
- Reconnecting** : The virtual serial port set by Redirector on the PC is reconnecting to the device server.
(If any kind of unexpected error causes disconnection, reconnection is attempted to a certain port and a port number at constant intervals.)
- Switching** : Multiple IPs are assigned to one port and IP changes real-time.

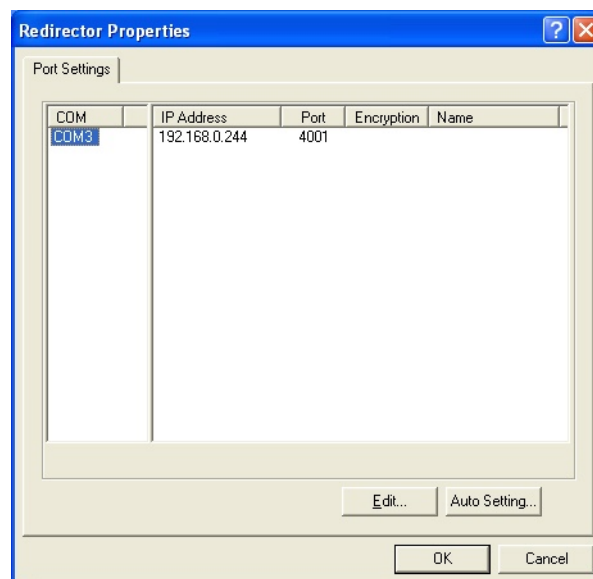
- Upon selecting a port and clicking "Stop", the Redirector service for that port is terminated.
- Once the service is terminated, Status tab for that port will be empty.
- Information such as the COM port number, IP address and Port number is shown when the service is performed. Once the service is terminated, this information automatically disappears from the screen.
- The service for one COM port can be started by either the "Start" button or the application program which handles Redirector actions. Regardless of the service-activating source, it is always the last action performed that achieves the higher priority.
- If you click "Exit", all the Redirector services for all ports are over, system tray icon disappears, and Redirector quits.
- If any COM port is on service when the "Exit" button is pressed, message box

indicating that the port is in use pops up and the service is not terminated.

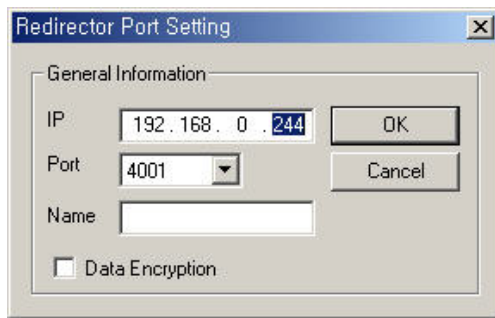
- If Redirector is restarted, the Redirector service may either be resumed automatically or not. This is determined by the previous configuration (the Tray icon configuration).

2) Using Redirector in Windows 2000/XP

- 1) If Redirector is not installed in your system, install Redirector. (Refer to [2.Installing Redirector](#) for more information)
- 2) If Redirector is installed in Windows 2000/XP, virtual driver is loaded on the system automatically when the PC boots.
- 3) With the configuration program, you can identify that virtual COM ports are created. Alternatively, you can also check "Ports (COM and LPT)" in Device Manager. (To open the Device Manager, select Start → Setting → Control Panel → System → Hardware → Device Manager)
- 4) Run the configuration program by selecting Start → All Programs → SystemBase Portbase → COM Port Redirector → Configure Installed Ports



- 5) If you like to change the IP address and the socket number of the device server assigned to the virtual COM port, click "Edit".
- 6) Enter the IP address, socket number (4001 to 4032) and the port name (32 bytes maximum) that you like to edit. Click "OK" to apply new settings.



- 7) If you want to enable data encryption for your communication, check “Data Encryption”.
(Encryption mechanism used in this option is SEED, a 128-bit symmetric key type block encryption algorithm.)

- 8) If the user application opens the virtual COM port registered in the system, the Redirector service starts. The connection is established using the IP address and the socket number designated for the device server.

- 9) If the user application closes the COM port, the connection with the device server is lost and the Redirector service is terminated.

4. Uninstalling Redirector

Uninstall process for Redirector is the same for all Windows versions.

- From Windows, select Start → All Programs → SystemBase Portbase → COM Port Redirector → Uninstall COM Port Redirector". Uninstall wizard will guide through the process.
- All pre-installed virtual COM ports are removed when Redirector is uninstalled.