COM Port Redirector

User Manual

Ver 2.3

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Revision History

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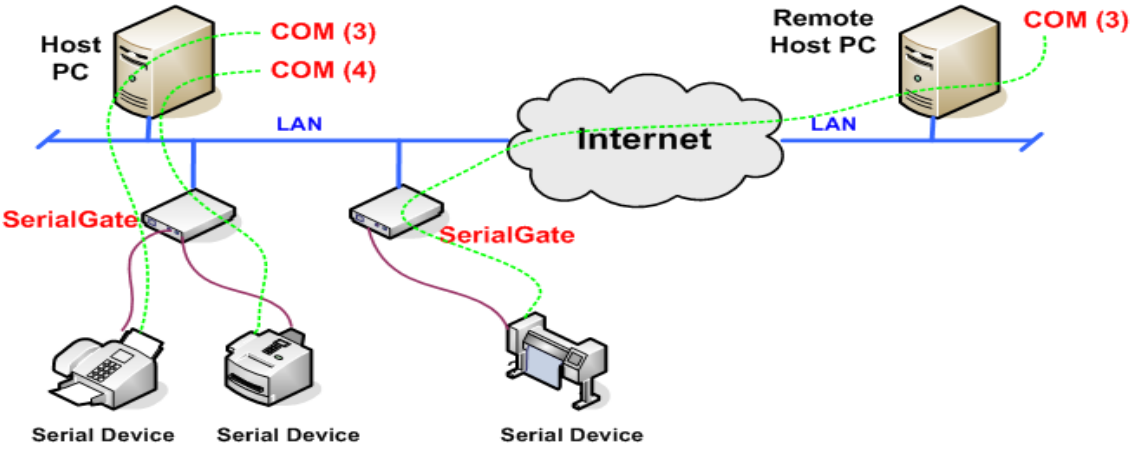
Chapter 1. Overview

COM Port Redirector includes network COM port driver and redirector control, and they allow using serial ports in the device server in the same manner as local COM ports on the PC. Up to 255 COM ports can be added to one PC using the redirector. Remote serial ports in device servers connected via network can be utilized as COMx ports installed in the local PC.

The following diagram depicts how the PC with COM Port Redirector installed can communicate with the serial devices connected to network.



Software

- COM Port Redirector driver: System driver is compatible with Windows 2000/XP/2003/Vista/7/2008 creating virtual serial ports that are detected just like real COM ports. When the driver is installed, Redirectorctl.exe is executed to connect COM ports to network.

- Redirector Control: It is an application responsible for adding and removing virtual COM ports and providing user interface for port configuration and control. It operates with COM Port Redirector driver to establish connection under the TCP/IP network. The following is an executable file to run on Windows.

File name: Redirectorctl.exe

- Installer: This Windows application either installs or uninstalls COM Port Redirector.

File name: install.exe

Environment

More port installations require more CPU power and high memory usage.

- CPU : Pentium 1Ghz or better
- Memory : 512Mb or higher
- O/S : Windows 2000/XP/2003/Vista/7/2008(64bit)
- Network : 10M Ethernet or faster

Hardware

Redirector is compatible with the following SystemBase products.

- Portbase Series
- SerialGate Series
- Eddy Module Series

Technical Support

SystemBase provides technical support as follows.

1. Please visit the Technical Support page in SystemBase website, http://www.sysbas.com/ FAQ page is available and a user can post a question on the board.

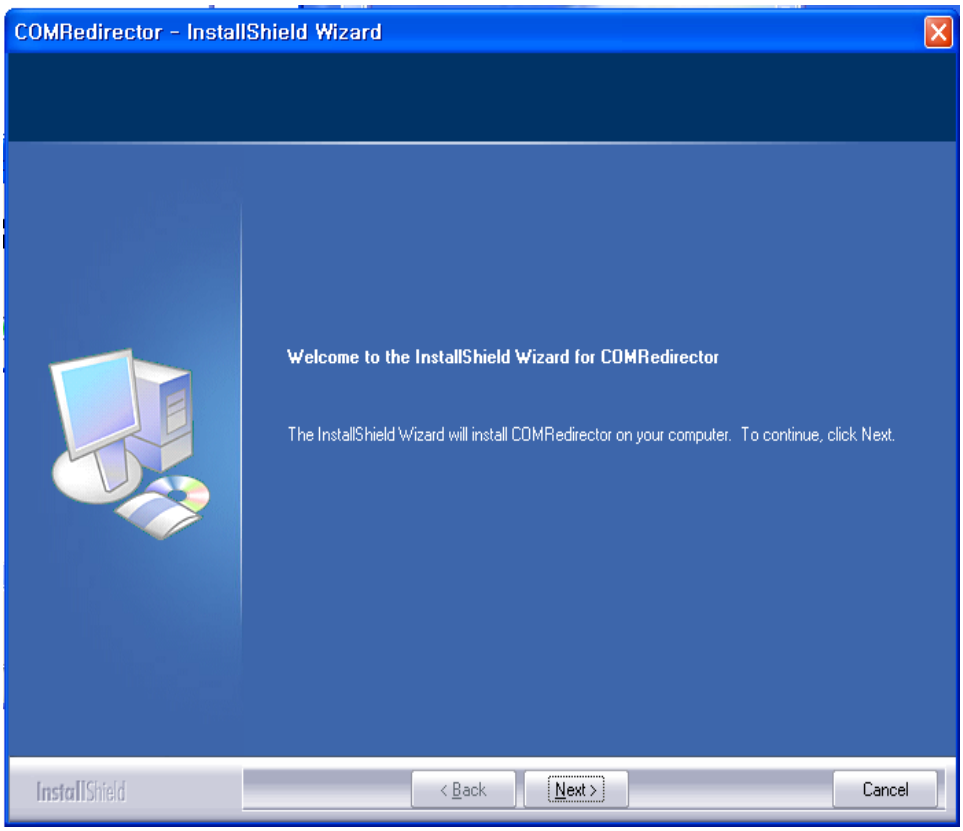
2. E-mail at tech@sysbas.com and the response will be sent as soon as possible.

3. For more immediate assistance, please contact us via telephone. (+82-2-855-0501)

Chapter 2. COM Port Redirector Installation

Install Guide

- Insert the install CD into the CD-ROM drive.
- Run Com Redirector Setup V2.3.exe
- Redirector installer starts and provides installation details. Click “Next” to continue.



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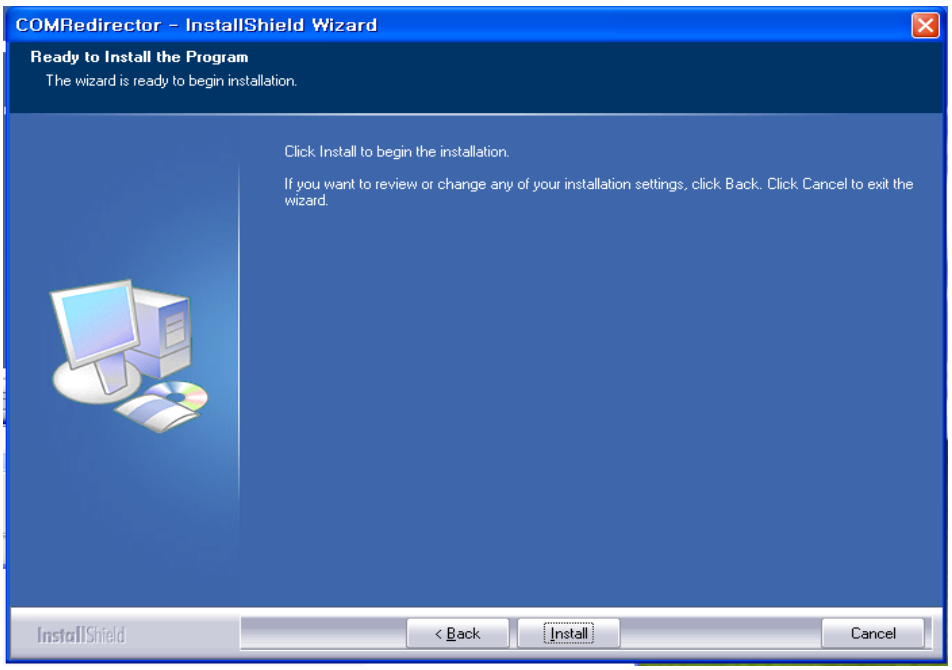
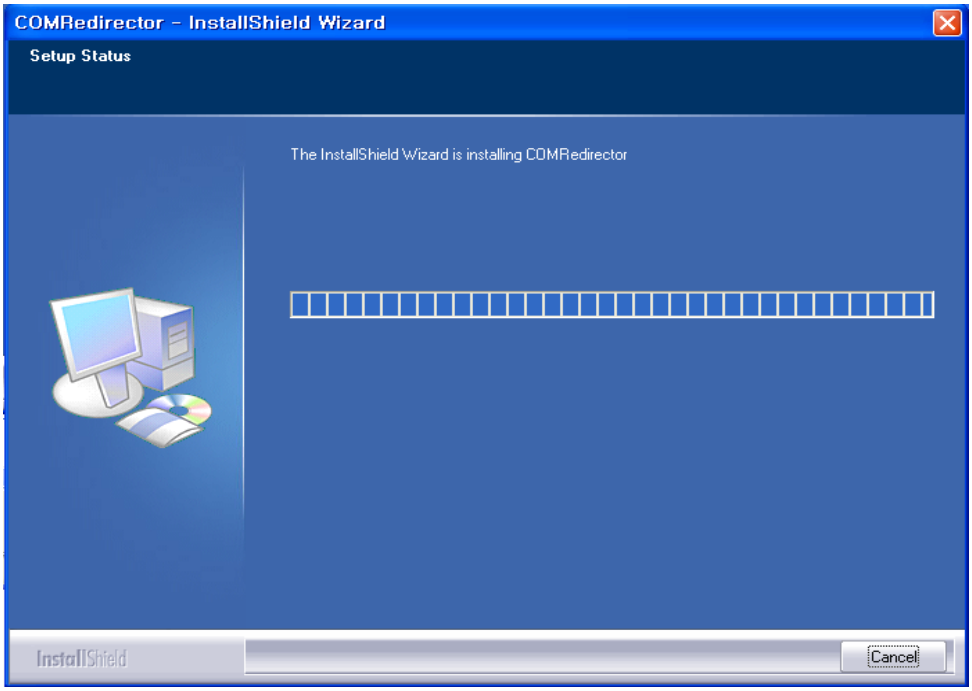
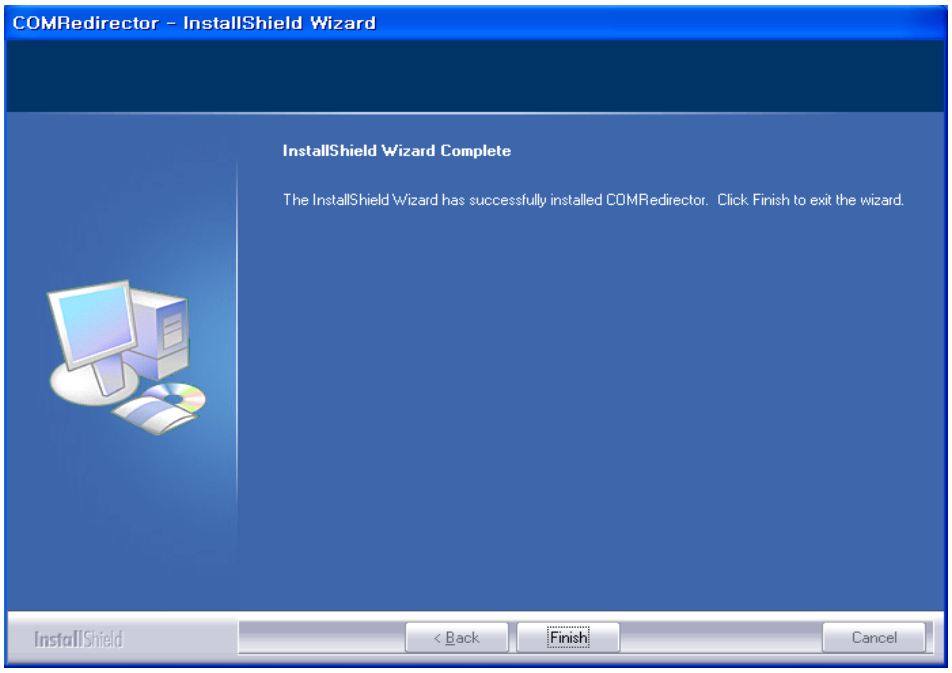
- Click “Install”





- Click “Finish” to complete the setup.



- A shortcut will be created under Start → All Programs→ SystemBase → Redirector.
- Redirector Control starts automatically after the setup is complete, and by default it automatically starts when Windows starts.

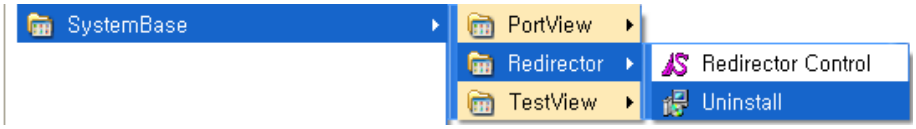
> (Note)
> Since RedirectorCtl.exe is responsible for basic functions of COM Port Redirector, it should be running before starting any applications using virtual COM ports. In Windows Vista/7/2008 64bit, a user should run Redirector

- With the Redirector Control, you can add or remove ports, view or modify port information, and monitor ports in real-time.

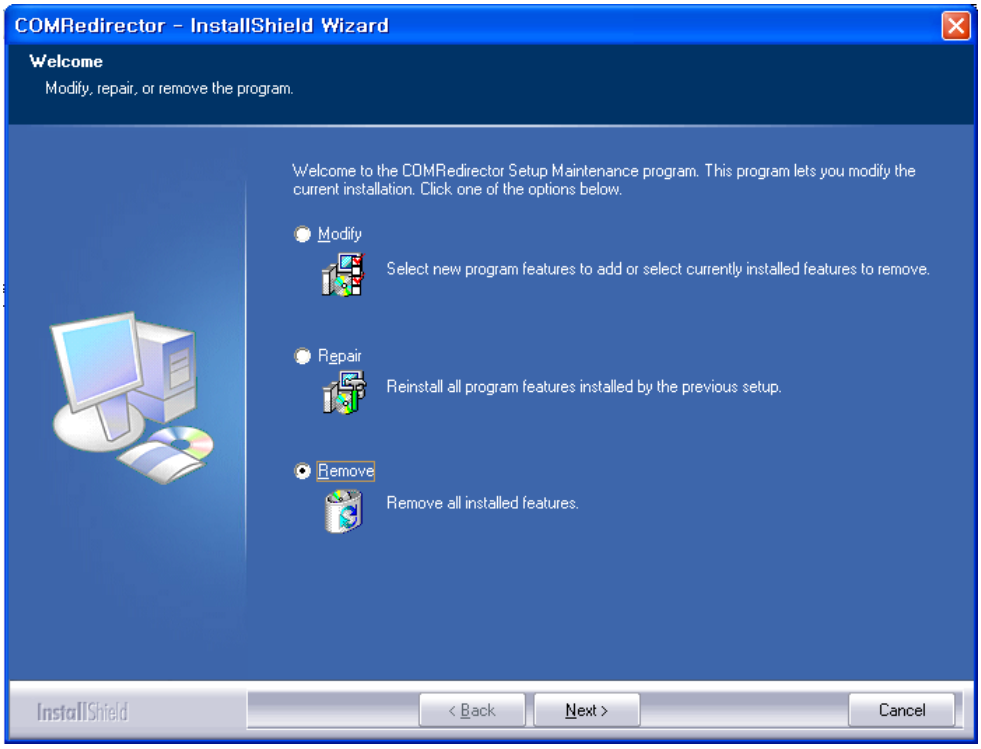
Uninstall Guide

When you uninstall COM Port Redirector, all virtual COM ports are removed as well.

In a directory that Redirector install CD or Redirector is installed, click COM Redirector Setup V2.3.exe or click "Start → All Programs → SystemBase → Redirector → Uninstall" as follows.

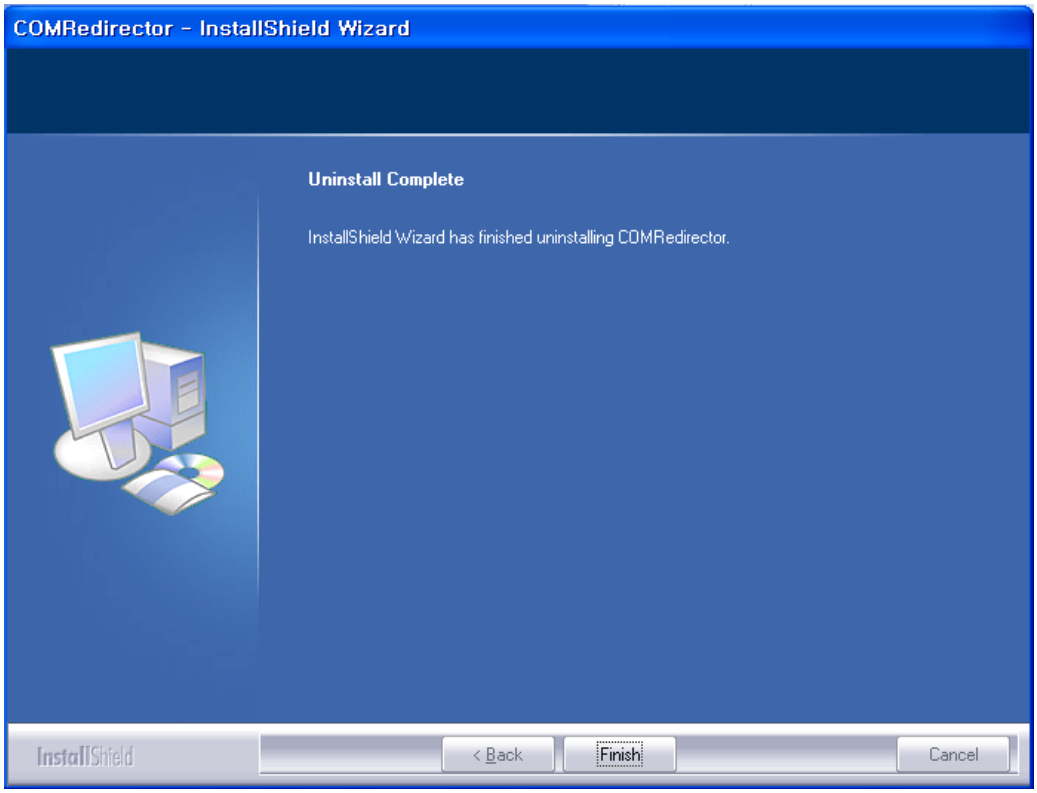


- Click "Remove" and click "Next"



- Click "Yes"

- Click "Finish" to complete the uninstallation.

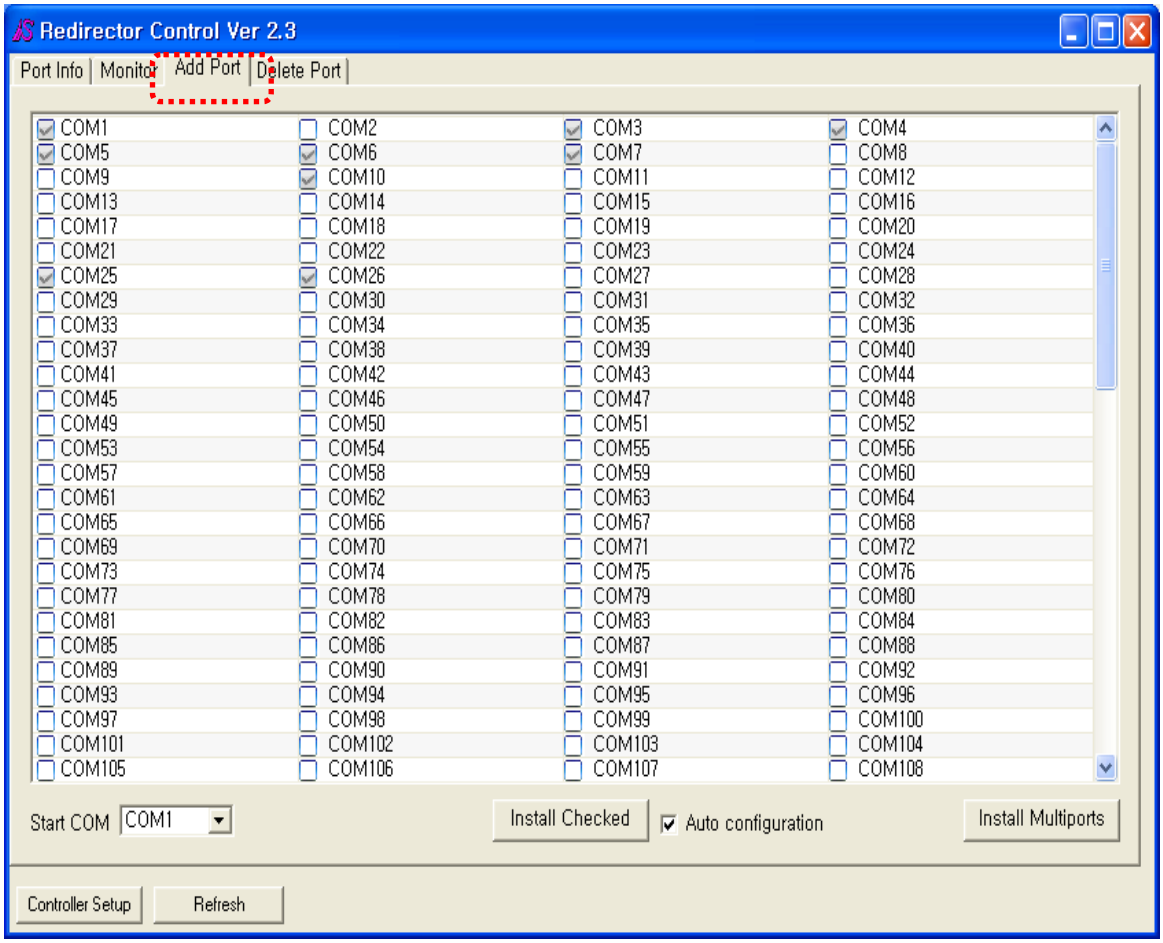

COMRedirector - InstallShield Wizard
Uninstall Complete
InstallShield Wizard has finished uninstalling COMRedirector.
InstallShield
< Back
Finish
Cancel

Chapter 3. Adding / Removing Ports

A user can install, add, or remove up to 256 virtual COM ports. The process of adding ports is identical to installing ports.

How to run panel

As shown in the figure below, System tray icon can be found. If a user double-clicks it to add/remove/monitor a port, control panel display will be shown.



- **Start COM**

  This option defines the first port to be displayed on the panel. 256 ports starting from the 'Start COM' are displayed. You can change this port any time.

- **Install Checked**

  Install all ports checked from the panel.

- **Auto Configuration**

  If checked, all ports are automatically assigned the IP address and port number of the device server. If unchecked, you can manually configure ports form the "Port Info" tab.

- **Install Multiports**

  When there are a number of ports to install, manually checking each of them is a tedious job. In this case, click "Install Multiports" to assign only the Start COM number and the number of ports to install. The port number will be automatically added from the specified number to 4016.

- **Controller Setup**

  Set up the starting COM number and Tray icon feature in the control panel display.

- **Refresh**

  Update all 256 checkboxes from starting number and COM port number information on the panel.

How to finish panel

If a user right-click on Tray icon, the following menu will be shown.

- Show Window: Click close button and reactivate Redirector Control Window
- Stop Redirector Service: Finish Redirector Control and it refers that a user is not able to use a virtual COM Port.

Reference
If Redirector COM port is in use by some application, Redirector Control does not quit. In order to do so, close all the application programs that use virtual COM ports, and select "Stop Redirector Service" in Tray icon menu.

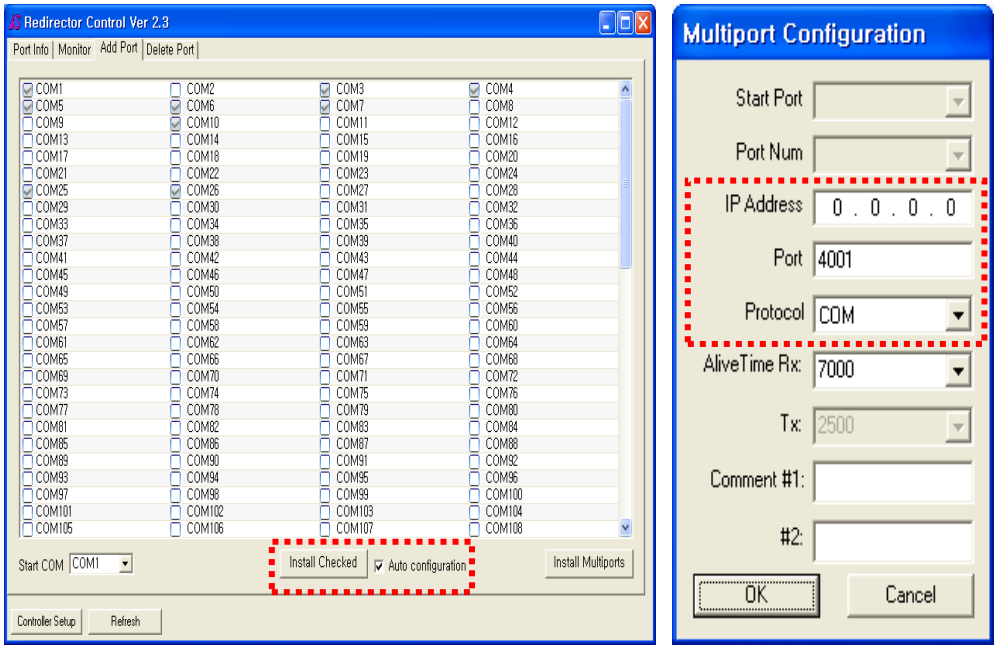
Note
Please be advised that all the virtual COM ports can not be used when a user is not running Redirector Control. If a user wants to use Redirector COM port again, go to "Start → Program → SystemBase → Redirector" and select RedirectorCtl.

Adding Virtual COM ports

Adding virtual COM ports is performed by Redirector Control.

1. Install Checked

Create a port if its corresponding box is checked.



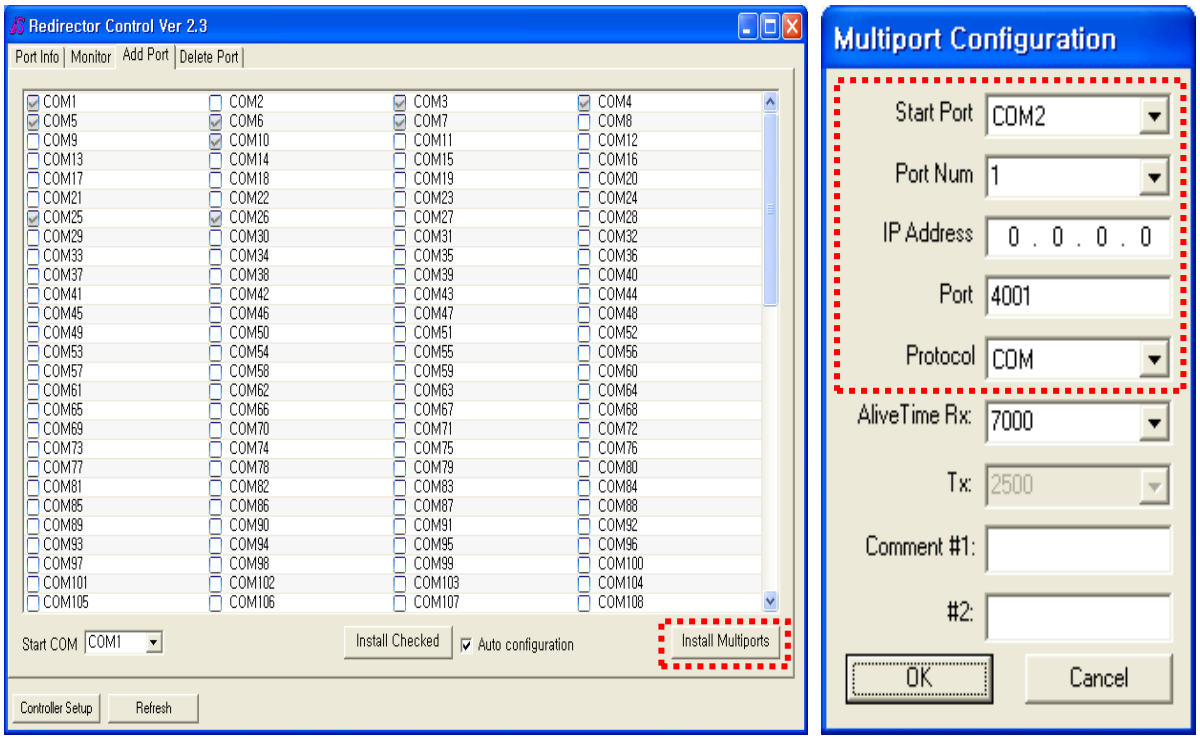
- Choose the ports that a user would like to install and click “Install Checked”
- Set up IP Address, port, protocol in “Multiport Configuration” and click “OK” button.

- IP Address: The IP address of Portbase. All new ports are assigned the value in this option.
- Port: The port number of Portbase. Port numbers increase by 1.
- Protocol: Communication method used in communicating with Portbase. All new ports are assigned the value in this option.
- COM: Normal COM port operation (Selected by default)
- Encryption: Select this option when you want data encrypted.

  (SEED encryption method, a symmetric key type 128-bit block encryption algorithm, is used.)
- Raw: Only data is transmitted in ordinary COM modes.

2. Install Multiports

- A user can create up to 32 ports from the start port

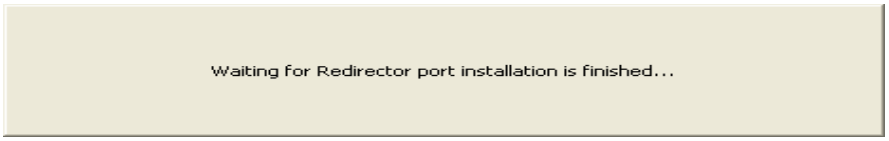


- Click “Install Multiports”
- Set up IP Address, port, protocol in “Multiport Configuration” and click “OK” button.

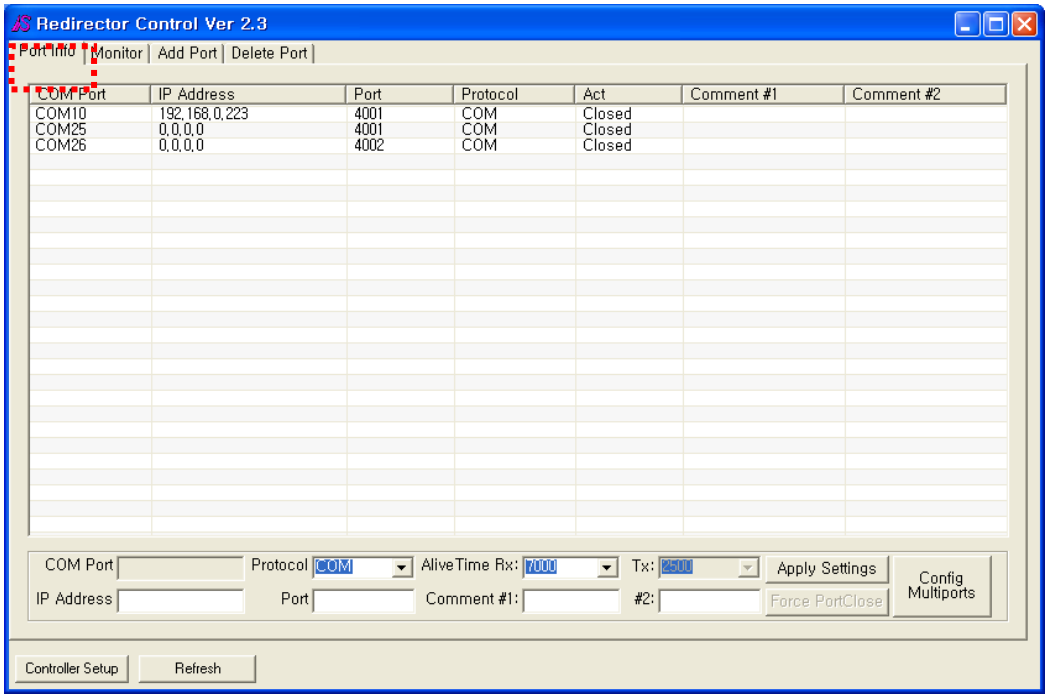
COM port number that can be installed is listed in “Start Port”, and the number of ports as assigned in “Port Num” will be installed from the Start Port.

Device Driver Installation

- When installation starts by selecting either “Install Checked” or “Install Multiport”, the following message is displayed until installation is complete.



- When the installation is complete, verify the port installed in “Port Info” tab.

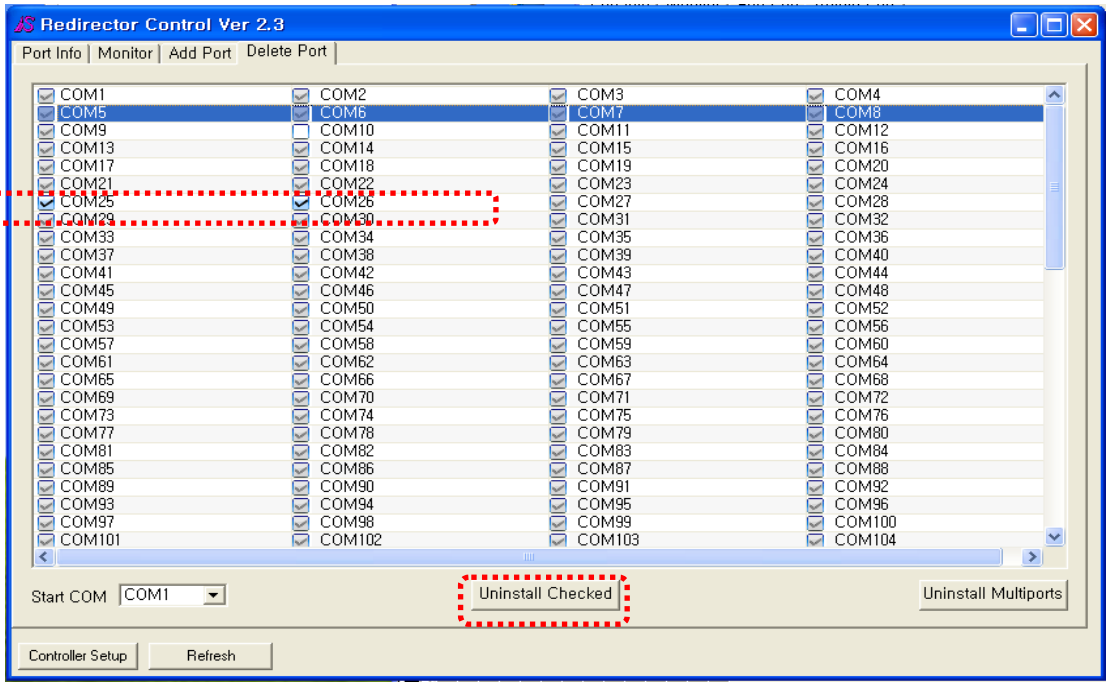


Deleting Redirector Port

Deleting virtual COM ports is performed by Redirector Control.

1. Install Checked

Delete a port if its corresponding box is checked.



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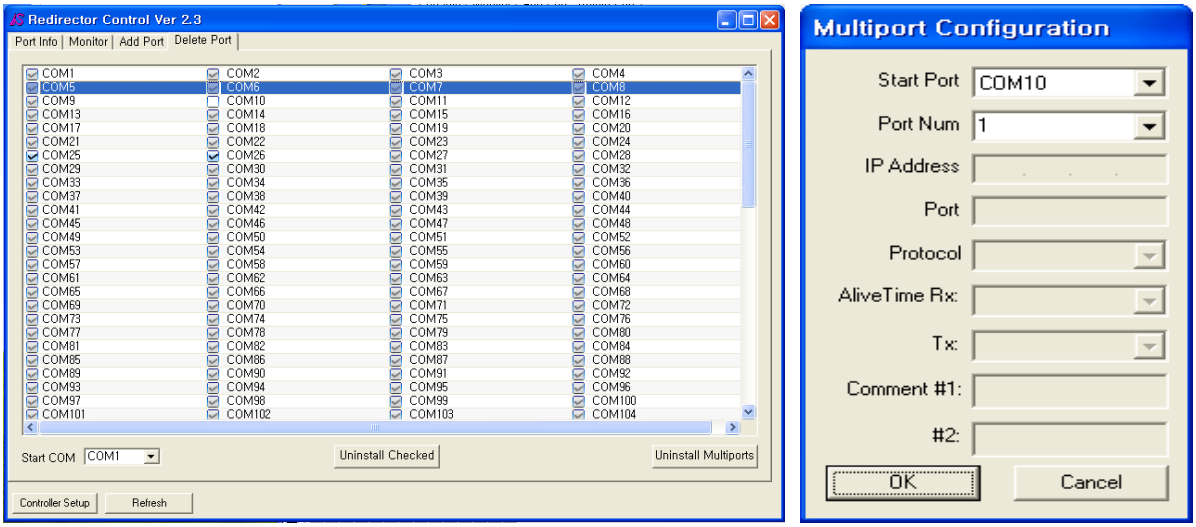
- When you select “Uninstall Checked”, ports are removed. Ports currently in use, however, are not removed.

2. Uninstall Multiports

- A user can delete up to 32 ports from the start port



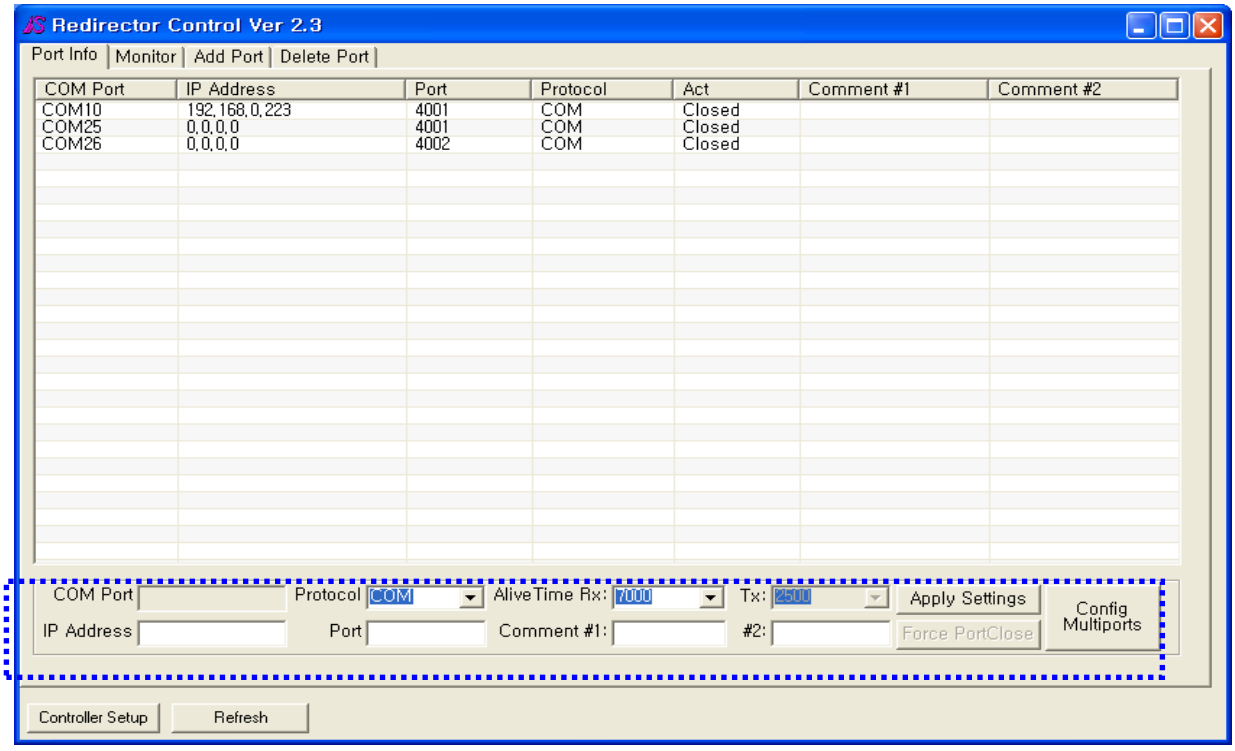
Chapter 4. Using Redirector Control

Overview

After COM Port Redirector driver is installed from the Redirector Control, you need to make use of these ports and make appropriate configurations.

View or Modify Port Info

You can view or modify COM port configurations in the “Port Info” tab.
All COM ports are displayed in the panel, along with settings and status.

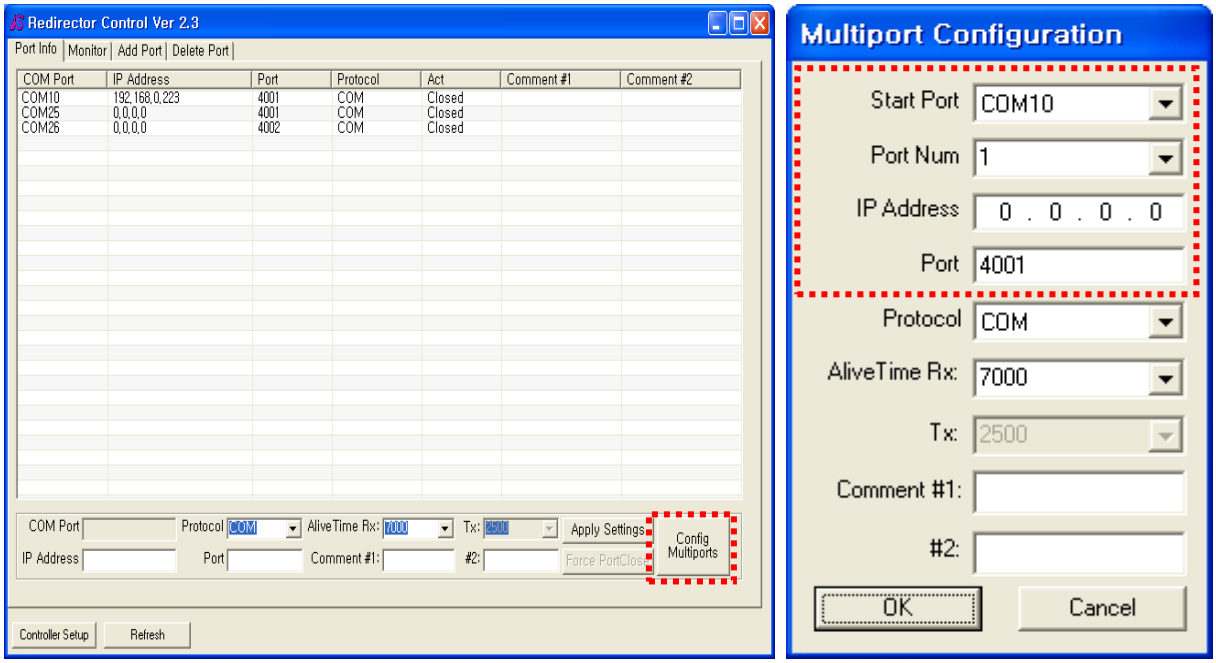


1. Single Port Configuration Changes

When you want to change port settings, click COM port that you wish to change, and make changes to IP address, port number, or protocol. Click “Apply Settings” to apply these changes.

2. Multiple Port Changes (Config Multiports)

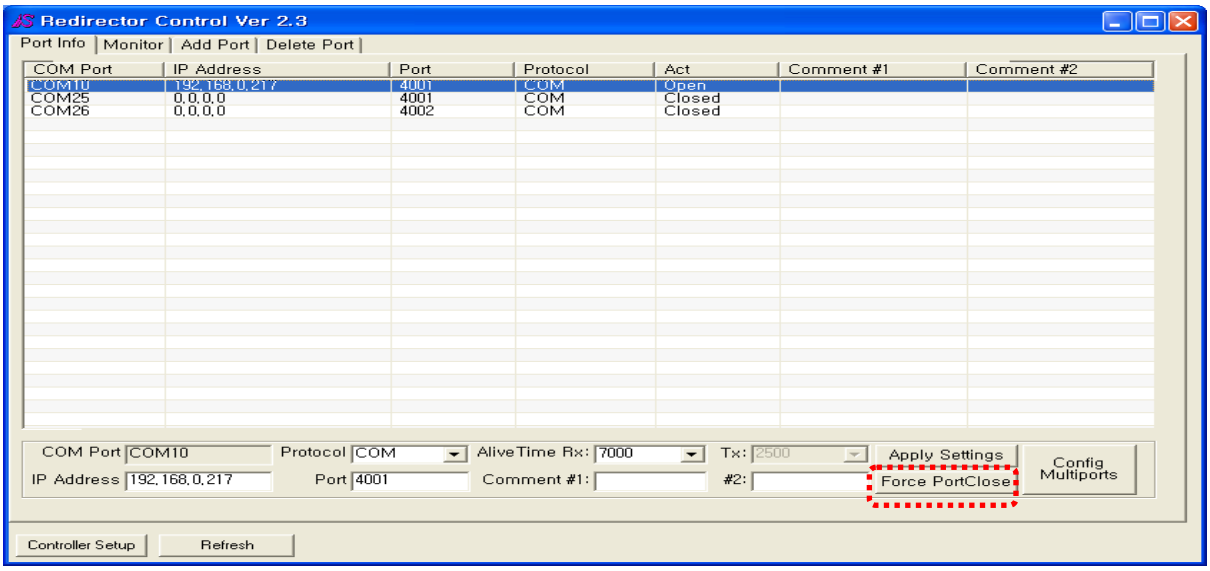
"Config Multiports" option allows changing IP address, port number, and protocol settings of multiple ports at once.



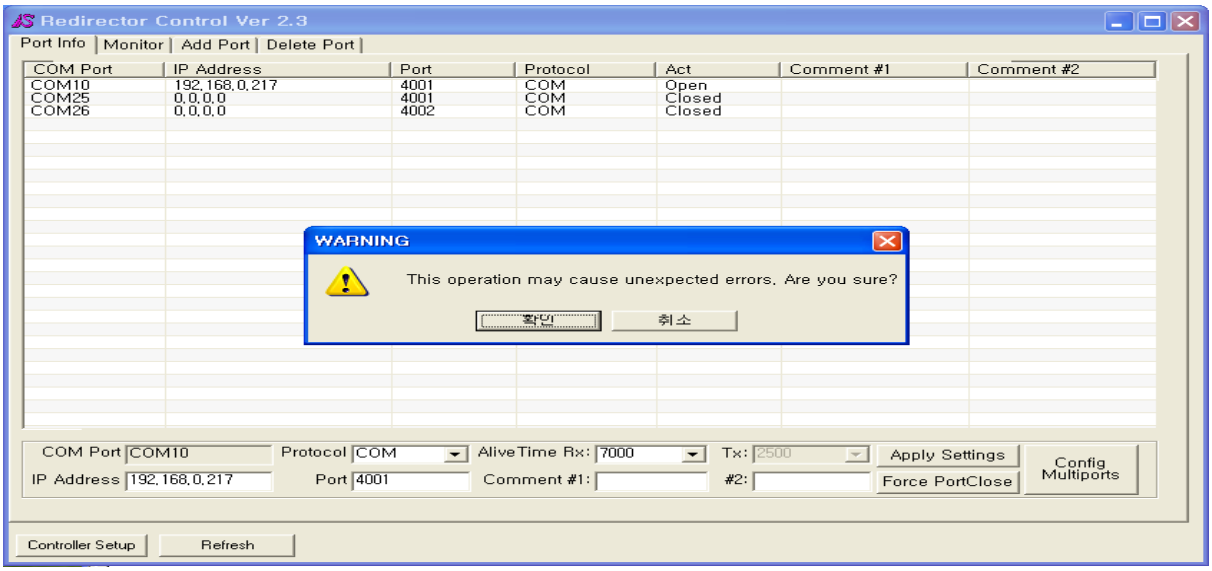
Force Port Close

"Force Port Close" closes any COM port that fails to close in normal operation.

- When you click open COM ports, "Force Port Close" button is activated.
- Click "Force Port Close"



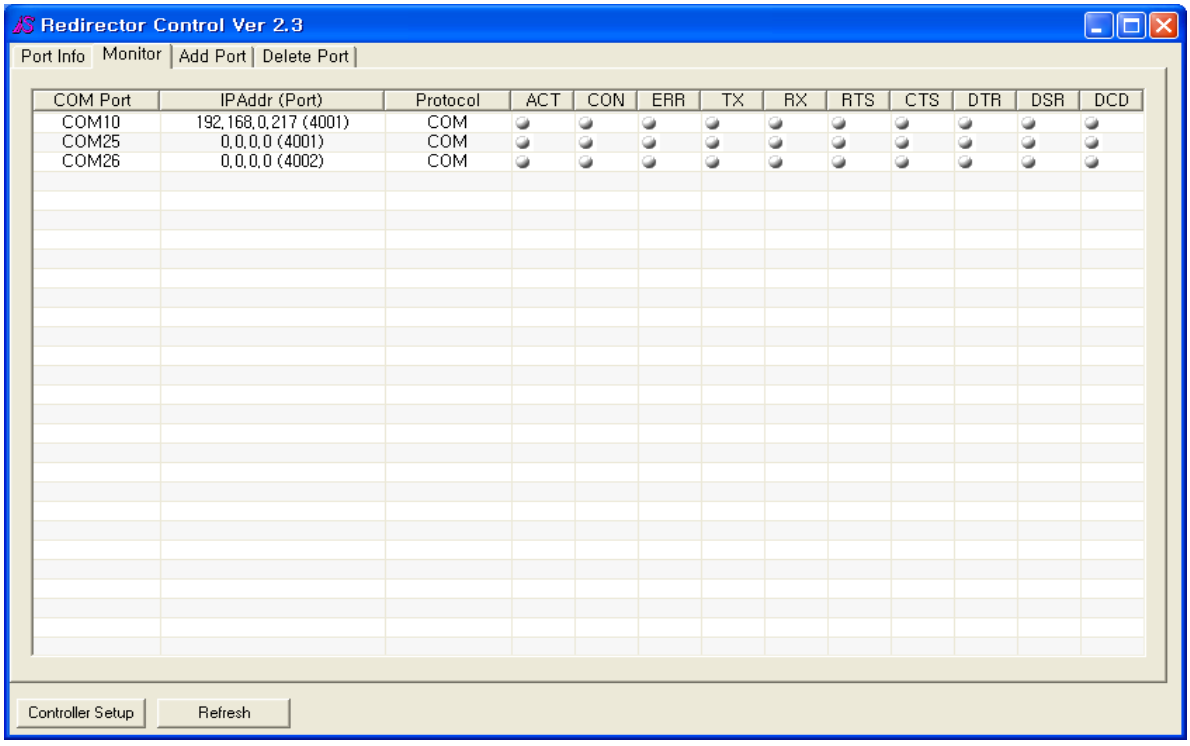
- Click “OK”



Warning:
If you perform “ Force Port Close” on ports that are operating normally, system might hang or unexpected errors are prone to occur. Use this option at your own risk, only in emergency when applications fail to close ports.

Port Status Monitor

Select “Monitor” tab to monitor port status in real-time.

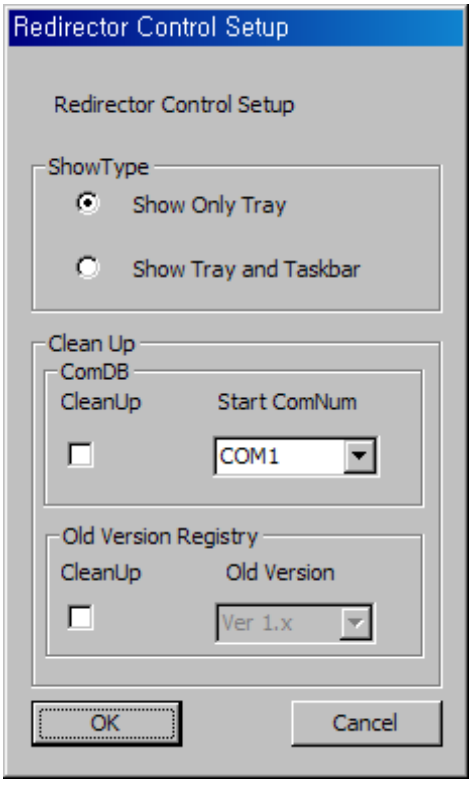


- ACT : Blue when application is using this COM port.
- CON : Blue when this port is connected to Portbase.
- ERR : Red when connection with Portbase has errors.
- TX : Green when transmitting data
- RX : Yellow when receiving data
- RTS, …, DCD : Modem signals for each port. Blue when on.
- “Refresh” button

When you changed COM port numbers or installed serial ports manually from external applications, click “Refresh” or reactivate tabs to update changes. Remember to use this button when changes are made in “Device Manager”.

- “Controller Setup” button

Configure functions related to Com Port Redirector or initialize ComDB.
If a user clicks “Controller Setup” button, the following windows will be shown.



- Show Type: A mode that only shows tray and another showing both tray and taskbar are available for Show Type.

- ComDB CleanUP: Check Star Com Number and Clean UP, and click ‘OK’ button.
- Old Version Registry CleanUP: This is used to organize Registry for older version. Select the related checkbox and version, and click ‘OK’ button.