

# PortView

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## User Manual

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# Chapter 1. Introduction

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PortView is a real-time monitoring Windows application utility supporting remote configuration of the device servers by SystemBase.

## 1.1 Features

PortView supports following features from local and remote sites.

- Search and Configuration device servers in the network
- Real-time data monitoring
- Real-time device status
- Group configuration and management
- Connect the selected device server with web browser and/or telnet.

## 1.2 Software

Run following executable file to install.

PortView\_setup\_v2.3.exe

## 1.3 System Requirement

- CPU : Pentium 1GHz or greater
- Memory : 512MB or greater
- Operating System : Windows 2000/XP/2003/Vista/7
- Network : 100Mbps Ethernet Connection

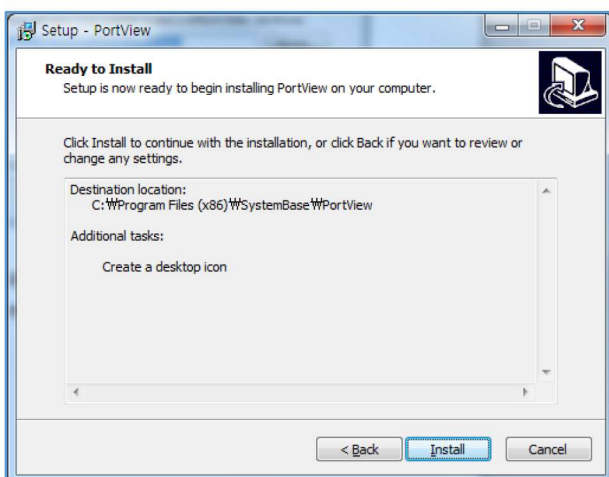
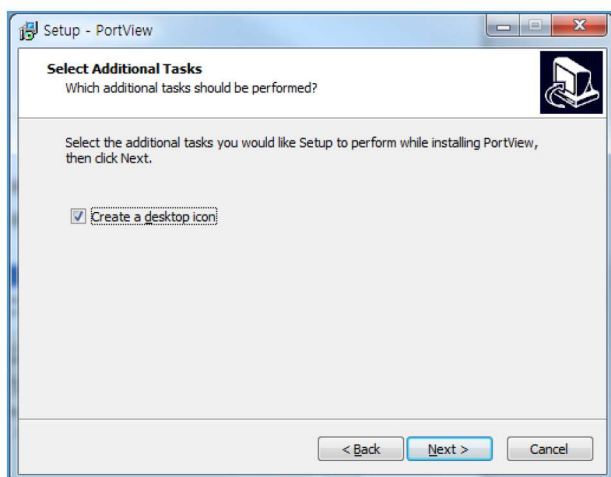
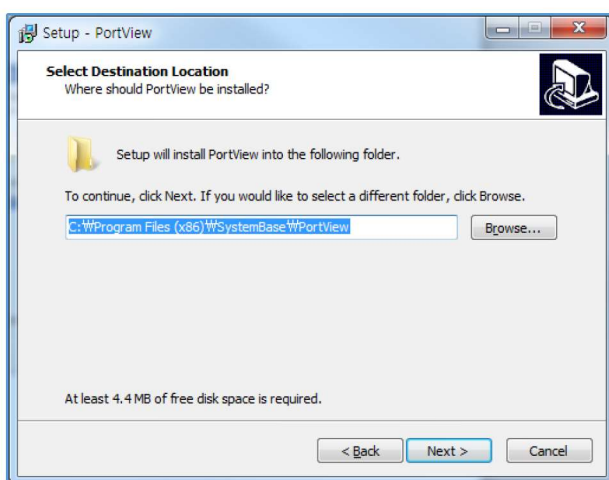
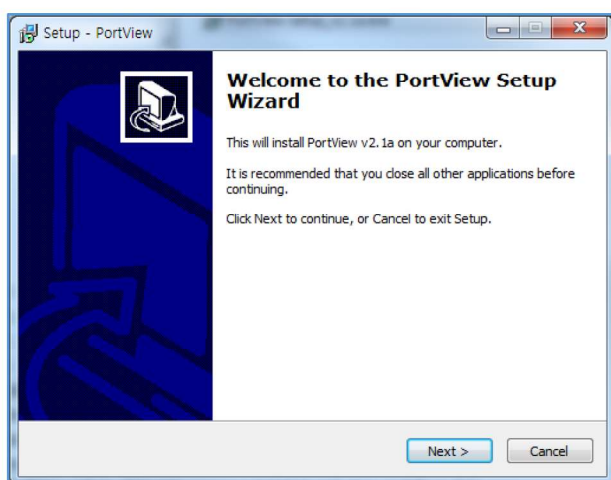
## 1.4 Supported Hardware

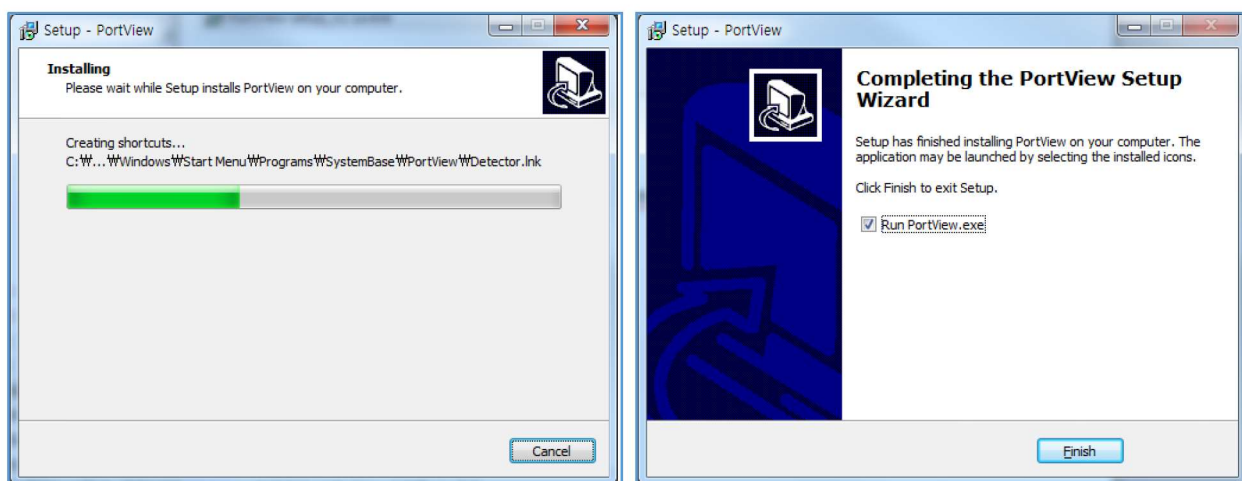
- SerialGate series
- Eddy CPU Modules

## Chapter 2. Installation and Execution

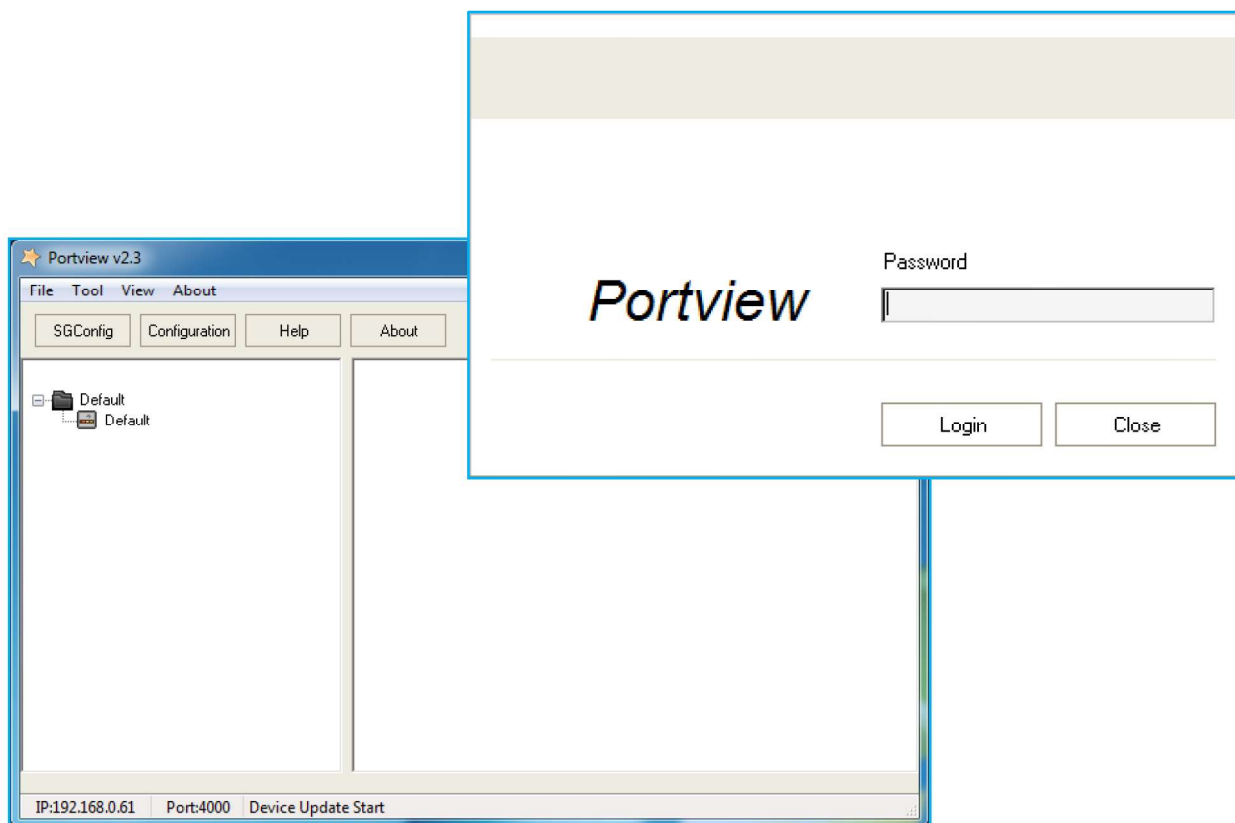
### 2.1 How to install

- If you have a CD included in the SerialGate unit, insert the CD into the CD-ROM drive.  
If you do not have a CD, please visit our technical support website to download the installation file at <http://www.solvline.com/>
- Run PortView installation file.



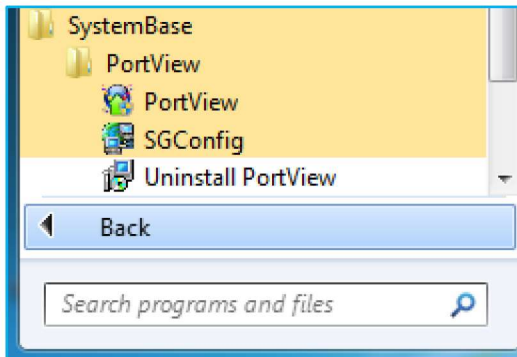


- After installing PortView, run PortView and click 'Login' to continue.



## 2.2 Execution

- Click All Programs → SystemBase → PortView then run PortView.



- If you have an icon in your desktop area, you can double click the icon to run it.

## Chapter 3. PortView

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### 3.1 SGConfig

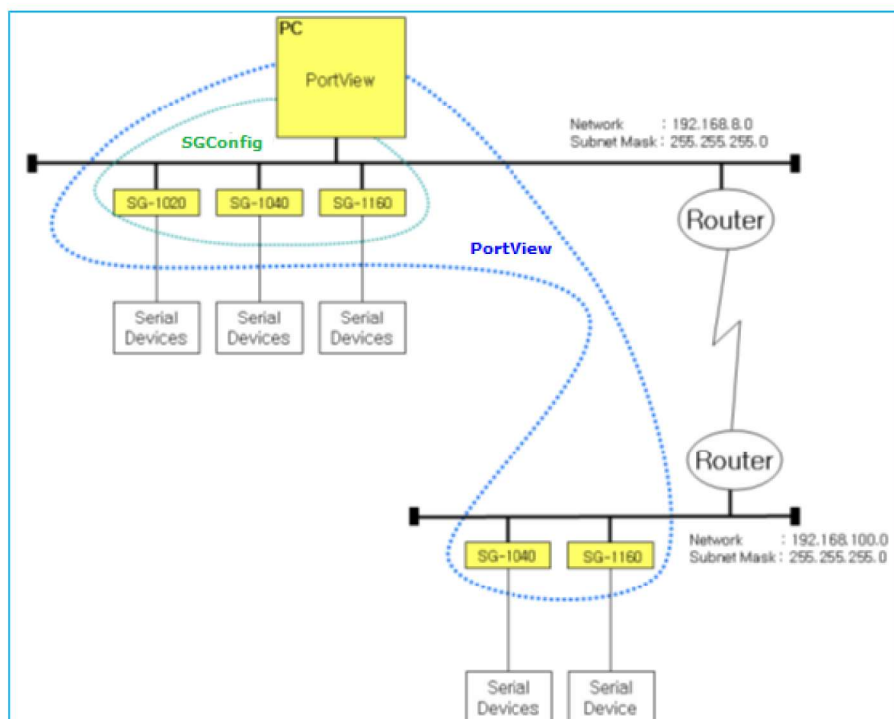
The SGConfig is included in PortView. The users can use search feature to locate SerialGate devices in the local network or with the configure feature, following settings can be modified: Network, Operation Mode, and Serial Option. If there are any devices servers connected to the router, the PortView can access them to let the user manage them.

### 3.2 PortView

The PortView provides numbers of features: SGConfig feature, real-time data monitoring, real-time device status, grouping and renaming devices, remote connection with web browser or telnet.

### 3.3 Searching Range of PortView / SGConfig

The following figure shows the operating range of the PortView and SGConfig. However, depending on the network status, some network settings may require changes.



#### 3.3.1 Area that can be detected by the Search feature

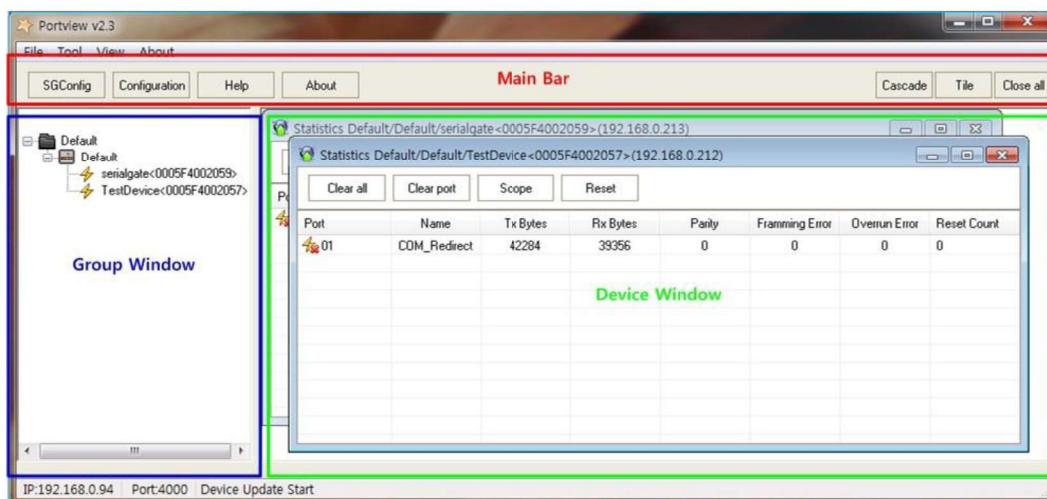
The green dotted line shown above is the area that the Search feature can detect the devices in the local network.

#### 3.3.2 Area that can be detected by the PortView

The blue dotted line shown above is the area that the PortView can detect the devices in the local network. If the network class is different, separate configuration may be required.

## 3.4 Structure

The PortView is divided into 3 main areas.



### 3.4.1 Main Window

The red squared area shown above is the 'Main Bar'.

The blue squared area is the 'Group Window'.

The green squared area is the 'Device Window'.

- SGConfig: Can search and configure the devices in the local network.
- Configuration: Can set the alarm, log, service socket, and password.
- Help: Open the folder where the PortView manual is located.
- About: Displays the version of the utility.
- Cascade: Cascade all windows.
- Tile: Tile all windows
- Close All: Close all windows in the utility.



### 3.4.2 Group Window

The blue square box shows the 'Group Window'. The users can see the group, sub-group, device server, or undefined.

- Group: Indicates the top of the folder structure. The users can add or delete groups.  
Ex) 'default': If the SerialGate is not defined in a group it will be added in this group.
- Sub-group: Can be created in the group. When clicked, devices in the group will be displayed in the sub-group window.
- Default: Displayed in default sub-group. Can be moved to other sub-group with the mouse. Hold the left mouse button and drag.
- Device: Added to a sub-group. Newly added devices will be shown in the default sub-group and can be moved to other sub-groups by drag & drop.

### 3.4.3 Device Window

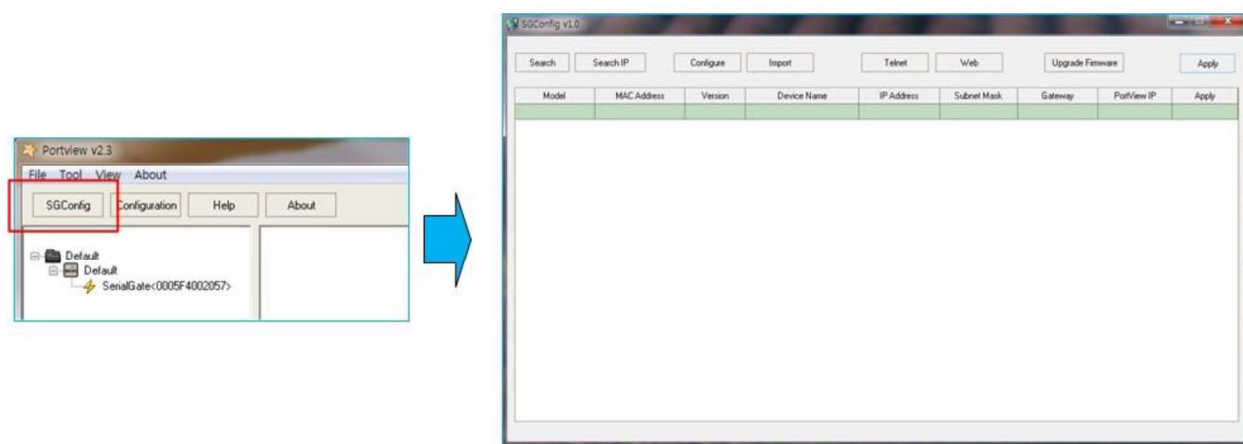
The green square box shows the 'Device Window'. Sub-group windows and statistics windows will be shown here. The windows can be shown in tile or cascade with the buttons in the 'Menu bar'.



## Chapter 4. Main Bar

### 4.1 SGConfig Feature

Can manage devices in the same local network.

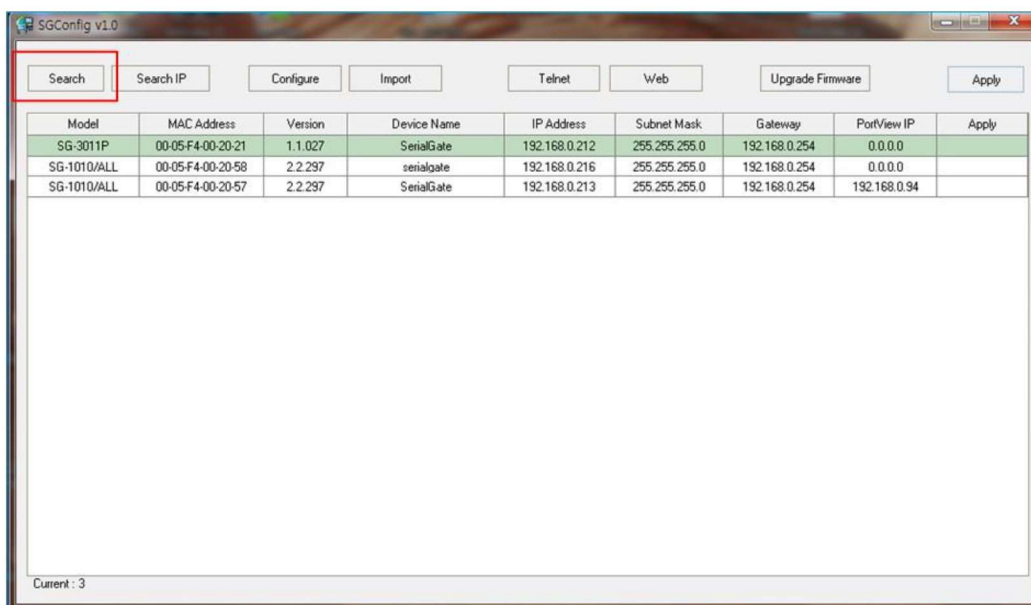


#### 4.1.1 SGConfig Menu

- Search: search devices in the local network.
- Search IP: Use this if the device is not shown with 'Search' feature or not in the same local network.
- Configuration: Change settings of the device.
- Import: Save the configuration of the device to the current PC.
- Telnet: Connect the device using telnet.
- Web: Connect the device using the web browser.
- Upgrade Firmware: Update the firmware of the device.
- Apply: Change values from the device name, IP address, subnet mask, gateway, PortView IP shown in the list.

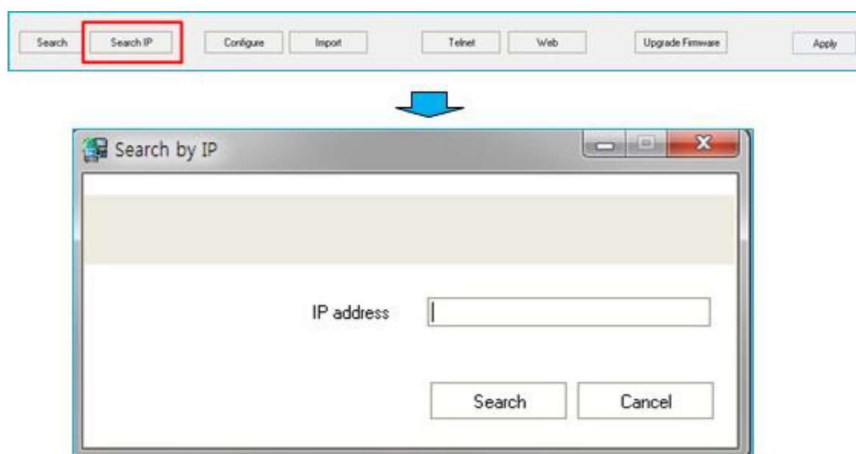
### 4.1.2 Search

Display device server in the local area network.



### 4.1.3 Search IP

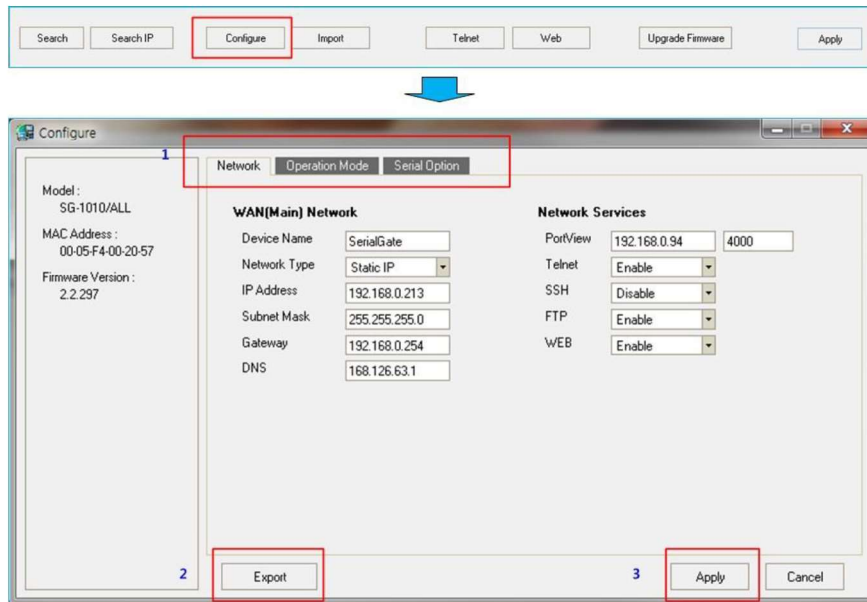
If the 'Search' feature does not work, use this to find it directly.



### 4.1.4 Configure

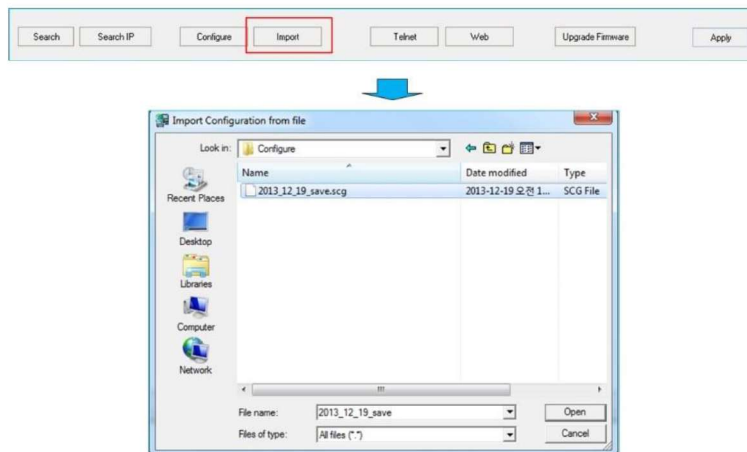
Change settings and apply.

- 1: Can set: network, operation mode, and serial option
- 2: When 'Export' button is clicked, current SerialGate settings can be saved.
- 3: When 'Apply' is clicked, current values shown in the settings will be applied to the device.



#### 4.1.5 Import

Load saved settings in a file from the PC.



#### 4.1.6 Telnet

Use telnet to connect to the selected IP address.

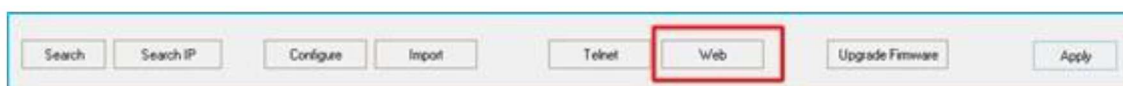
(If there are two devices with the same IP address, they can be accessed one at a time but not at the same time.)



#### 4.1.7 Web

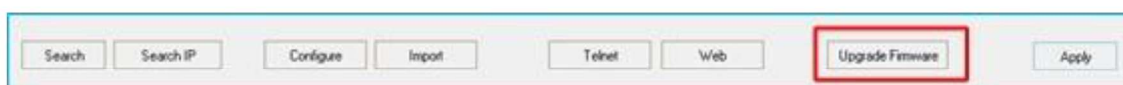
Use the web browser to connect to the selected IP address.

(If there are two devices with the same IP address, they can be accessed one at a time but not at the same time.)



#### 4.1.8 Upgrade Firmware

Update the firmware of the selected device.



#### 4.1.9 Apply

Change values from the device name, IP address, subnet mask, gateway, PortView IP shown in the list. When network status is changed, use the 'Search' button to refresh the list.



Model	MAC Address	Version	Device Name	IP Address	Subnet Mask	Gateway	PortView IP	Apply
SG-3011P	00-05-F4-00-20-21	1.1.027	SerialDate	192.168.0.213	255.255.255.0	192.168.0.254	0.0.0.0	
SG-1010/ALL	00-05-F4-00-20-57	2.2.297	Test Device	192.168.0.212	255.255.255.0	192.168.0.254	192.168.0.94	✓
SG-1010/ALL	00-05-F4-00-20-58	2.2.297	serialgate	192.168.0.216	255.255.255.0	192.168.0.254	0.0.0.0	

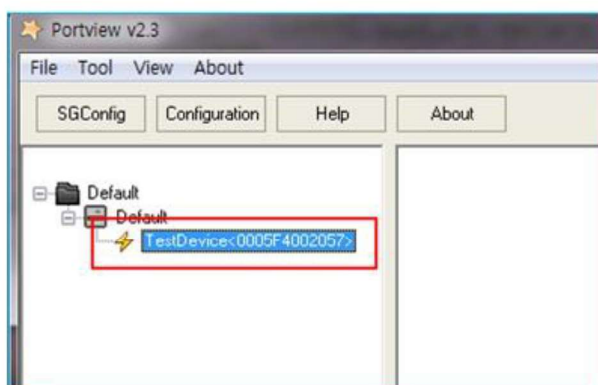


#### 4.1.10 Configure IP address of the PortView

In the searched device list, change the IP address of the PC which the users wish to use the PortView.  
After typing it, click apply button to change the settings in the device.

Search	Search IP	Configure	Import	Telnet	Web	Upgrade Firmware	Apply	
Model	MAC Address	Version	Device Name	IP Address	Subnet Mask	Gateway	PortView IP	Apply
SG-3011P	00-05-F4-00-20-21	1.1.027	SerialGate	192.168.0.213	255.255.255.0	192.168.0.254	0.0.0.0	
SG-1010/ALL	00-05-F4-00-20-57	2.2.297	Test Device	192.168.0.212	255.255.255.0	192.168.0.254	192.168.0.94	✓
SG-1010/ALL	00-05-F4-00-20-58	2.2.297	serialgate	192.168.0.216	255.255.255.0	192.168.0.254	0.0.0.0	

After above process is complete, the device name and the MAC address will be shown in the PC where the PortView is installed.



The IP address of the PortView can be modified with the web browser. Login to the SerialGate and go to Network Settings → PortView Server IP / Port. (The default login ID and password is: serialgate / 99999999)

The screenshot shows the SerialGate web interface. At the top, there is a header with the SerialGate logo and the text 'Device Networking Experts'. Below the header, there is a table displaying device information:

MODEL	IP	MAC
SG-1010/ALL	192.168.0.212	00:05:F4:00:20:57

Below the table, there is a sidebar with a menu. The 'Network Settings' option is highlighted with a red box. The main content area is titled 'Network Settings' and contains two sections: 'Wan Port Setting' and 'Network Service Setting'.

The 'Wan Port Setting' section includes the following fields:

- Device Name: TestDevice
- Line Type: Static IP
- IP Address: 192.168.0.212
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.0.254
- DNS: 168.126.63.1

The 'Network Service Setting' section includes the following fields:

- PortView Server IP / Port: 192.168.0.94 / 8080 (This field is highlighted with a red box)
- Internet Service: Enable
- FTP Service: Enable
- Web Manager: Enable
- SSH Service: Disable

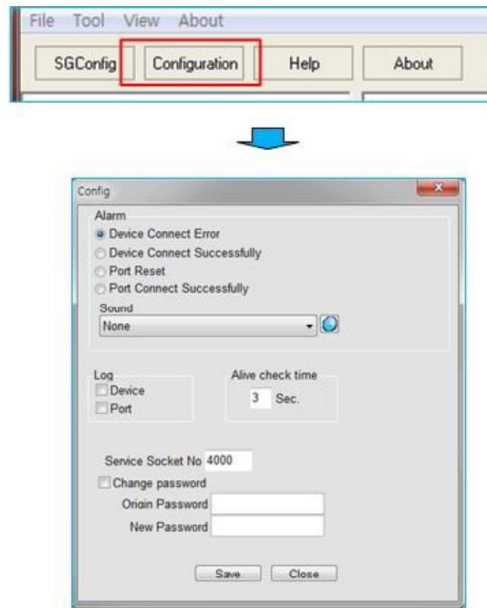
At the bottom of the page, there are 'Apply' and 'Cancel' buttons.

Click 'Apply' button after any changes are made.

## 4.2 Other Features

Provides features for configuration, help, about, sub-group, statistics, and how windows are arranged.

### 4.2.1 Config Menu



- Alarm: Set when the alarm will be triggered. The alarm sound can be set also.
- Log: Save log file if the message meets the condition.
- Alive Check time: Send a signal by given period to check if the device is still alive.
- Service Socket No: Select the port number to be used. The default value is 4000.
- Change Password: When executed, a window will pop-up. Change the password from this window.
- Origin Password: When not set by the user, there will not be any password. If the password need to be changed, type the current password.
- New Password: Type in the new password, if it needs to be changed.

### 4.2.2 Help

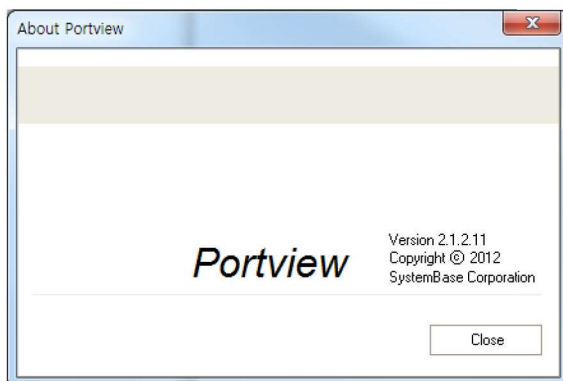
Can check the help. May come with a separate manual. Same as About > Help from the top menu.





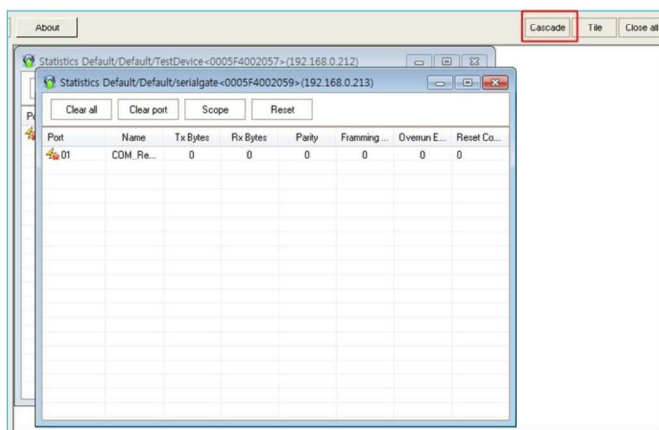
### 4.2.3 About

Displays the information of the PortView as shown below. Similar to About > About from the top menu.



### 4.2.4 Cascade Windows

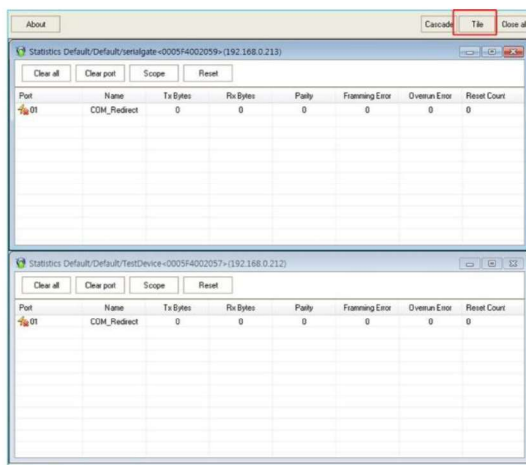
Cascade all available windows.





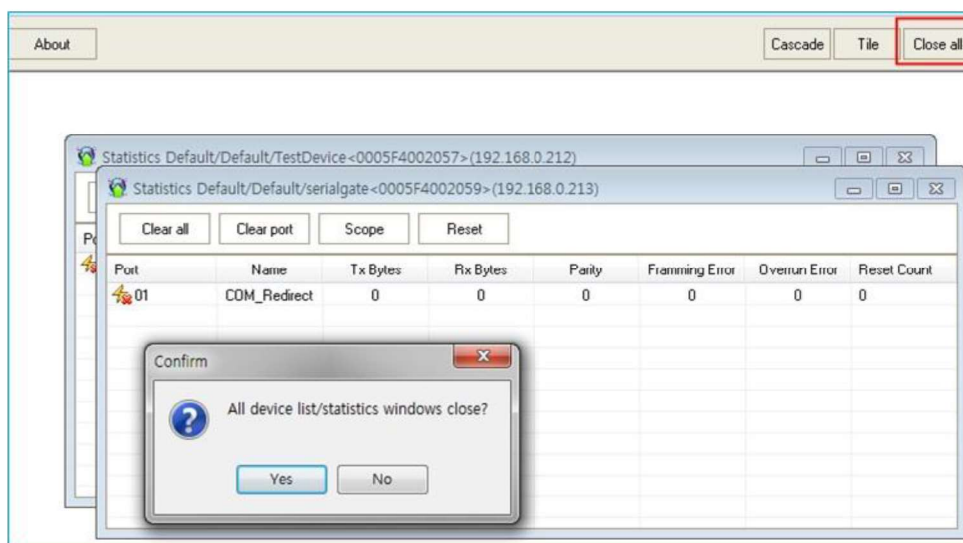
## 4.2.5 Tile Windows

Tile all available windows.



## 4.3 Close All

Close all windows at once. Similar to View > Close All from the top menu.



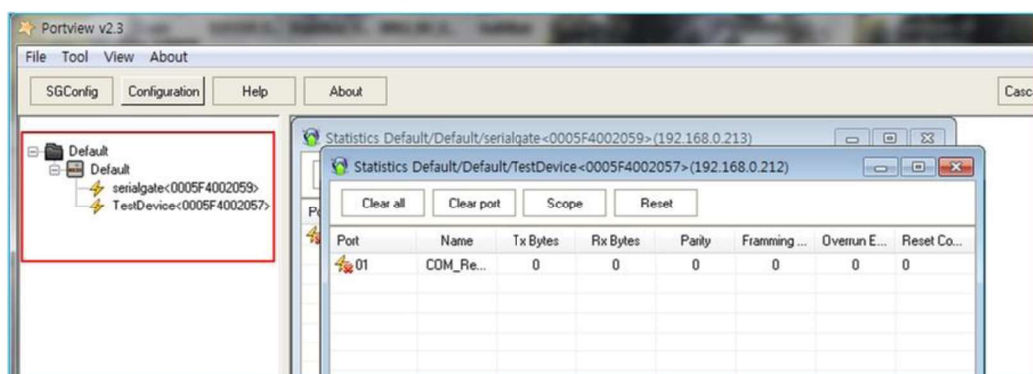
## Chapter 5. Group Window

In Group Window, the users can manage group, sub-group by arranging devices or renaming them.






### 5.1 Terminology

#### 5.1.1 Group

There are default and user defined groups. Only the sub-groups can have devices displaying under them.



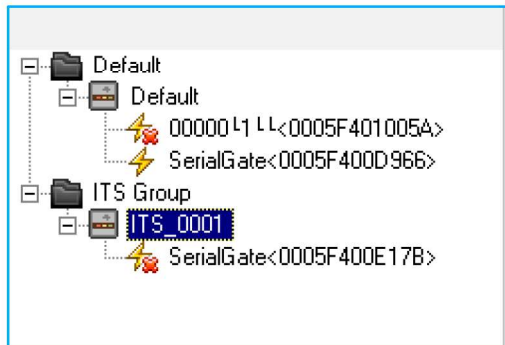
#### Legend

Icon	Description
	Group
	Sub-group
	Connected devices
	Disconnected devices
	Recently connected devices

- Default group: SerialGate not defined by the users are managed here.
- User defined group: Defined by the users. SerialGate can be moved to here from the default group.

### 5.1.2 'Sub-group' vs. 'Device List'

- Sub-group: A group under the group where the devices can be located.
- Device List: Devices in a sub-group. If a sub-group is double clicked, a manage window will appear.



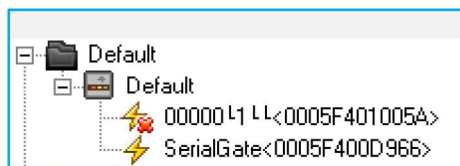
## 5.2 Create or Delete Group

Follow the examples below to add group/sub-group and add a device under it.

### 5.2.1 Initial Screen

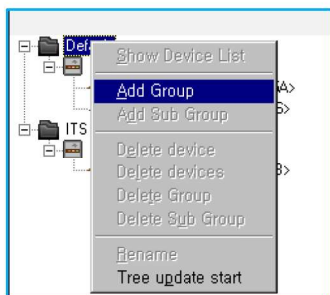
There are two devices in a default group.

- Group: Default
- Sub-group: Default
- Device List: SerialGate

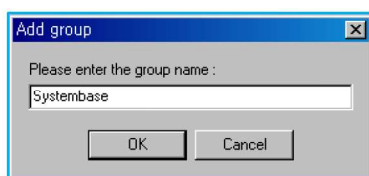


## 5.2.2 Add Group

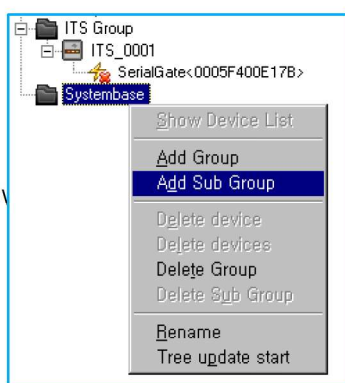
- Use the right mouse button on the screen to add a group.



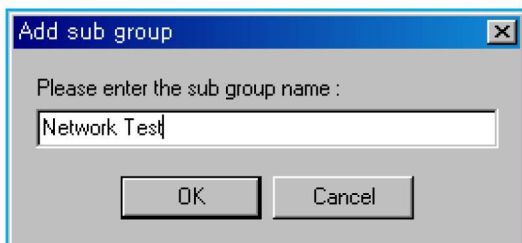
- Type the name of the group then click OK.



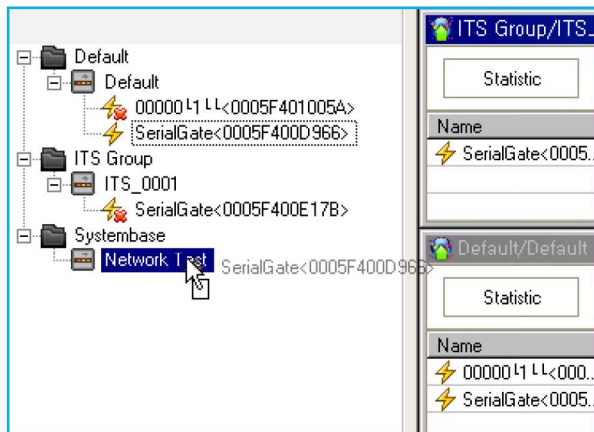
- Create a sub-group under the newly added group.



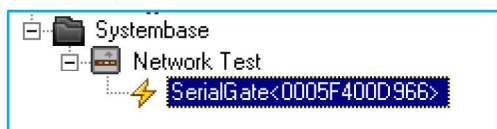
- Type the name of the sub-group then click OK.



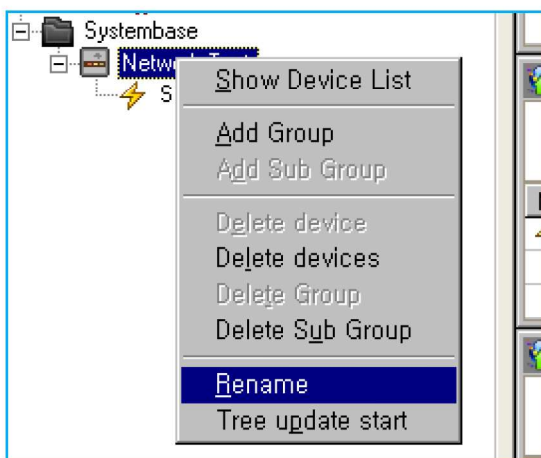
- The users can drag the sub-group to different location.



- Sub-group is moved.



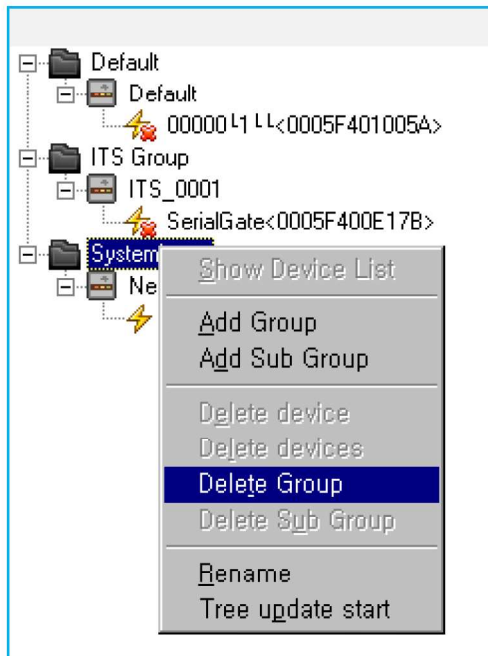
- Renaming group. Click 'Rename' after clicking right mouse button on the name of the group.



- Type the new name. This is only displayed from the PortView.

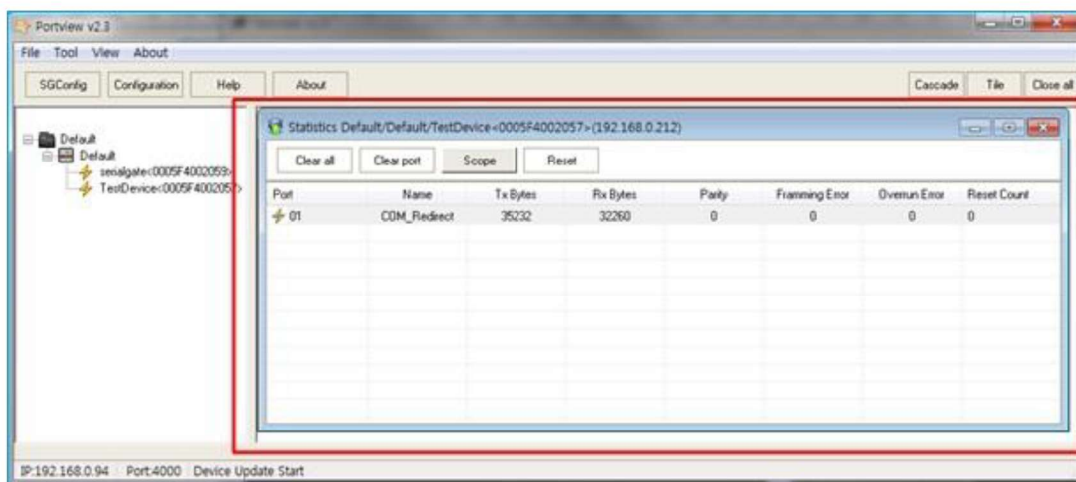
### 5.2.3 Delete Group

- Click the right mouse button from the group name to delete a group. Deleted devices will show up in the default group in a moment.

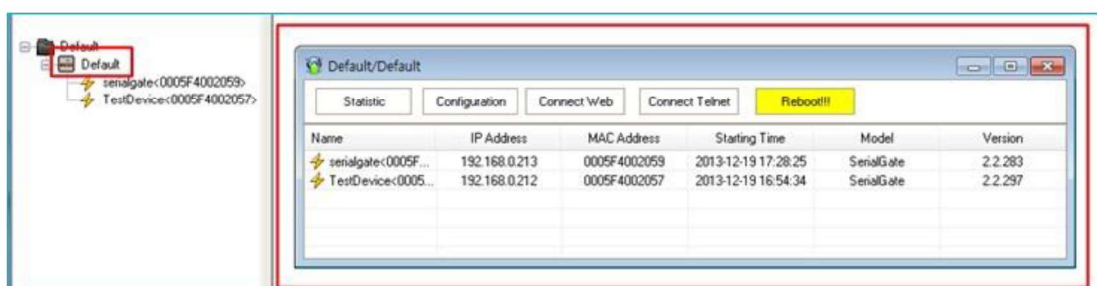


## Chapter 6. Device Window

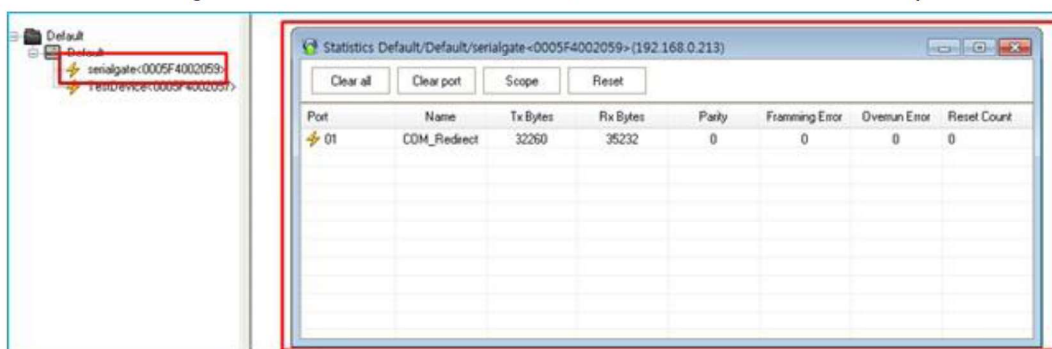
The 'Device Window' is the area in the red square below. The users can manage device lists or monitor the device servers as well as checking device status, information, and scoping I/O data.



- Sub-group Window: The users can group the devices in a sub-group to manage them. When double clicked, the current status of the device will be shown.

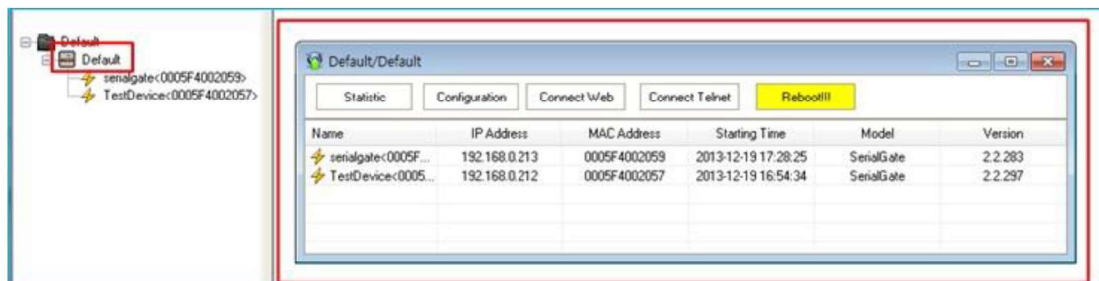


- Statistics Window: There will be names of 'Statistics Group'/Sub-group/Device'. Displays the monitoring feature of the device server, Tx/Rx bandwidth and scope feature.



## 6.1 Sub Group Window

Sub-group is used to manage the devices in the sub-group. Double click the sub-group from the group window in the left to see the device list in the right screen.

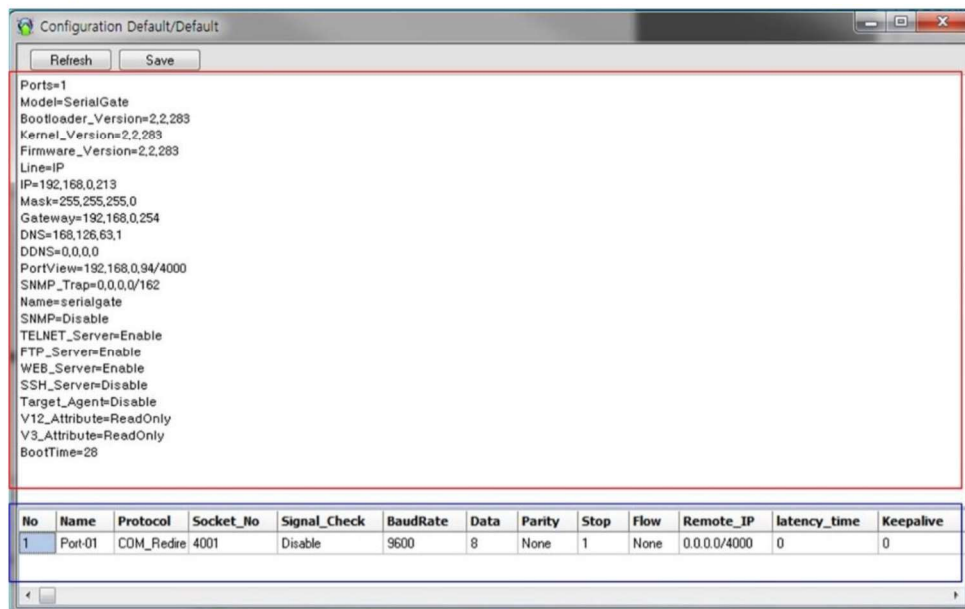


- Sub-Group Menu
  - ✓ Statistic: Display statistics of the devices in the sub-group.
  - ✓ Configuration: Display the configuration of the selected device.
  - ✓ Connect Web: Run the default web browser and connect to the selected device.
  - ✓ Connect Telnet: Run telnet and connect to selected device.
  - ✓ Reboot: Reset selected the device.
- Status: Since it is general information that does not need an explanation, it will not be explained.



### 6.1.1 Configuration

Display the configuration of the selected device.



- The red square box above shows the related information of the device while the blue square box shows the configuration of the each ports.
- Refresh: Refresh the information.

### 6.1.2 Remote Connection

For Connect Web/Connect Telnet/Reboot, please refer to explanation shown above.

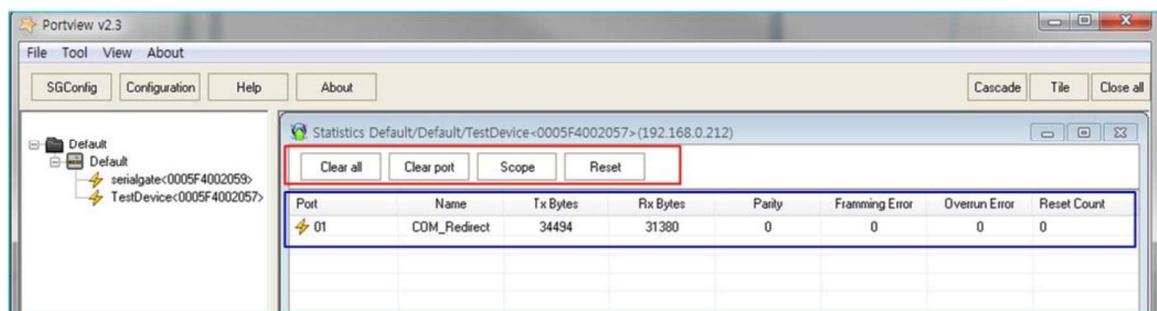
Chapter 6.2 deals with more information about the 'Statistic'.

## 6.2 Statistics

The 'Statistic' window will show when the 'Statistic' button is clicked from the sub-group. The users can monitor each device servers and reset them from this feature.

- **Statistic Menu:**

- Clear All: Reset counts from Rx/Tx Byte, parity, and errors for all ports.
- Clear Port: Reset counts for individual port.
- Scope: It can be run per one PortView. The scope feature for I/O data will be executed individually.
- Reset: Reset each ports.

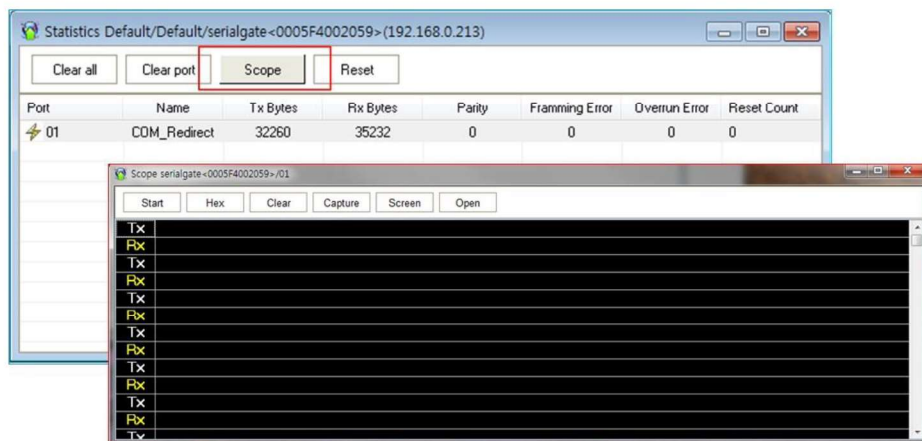


- **Entries in the list:**

- Port: Number of ports in the device server.
- Name: The name of the device.
- Tx/Rx Byte: Transfer/Receive Bytes
- Parity: Number of occurred parity errors
- Framing Error: Number of occurred framing errors
- Overrun Error: Number of occurred overrun errors
- Reset Count: Reset Count

## 6.3 Scope

The users can monitor the I/O data with the 'Scope' feature. The values will be displayed in Hex or ASCII character. Select the port to scope the data and click the 'Scope' button.

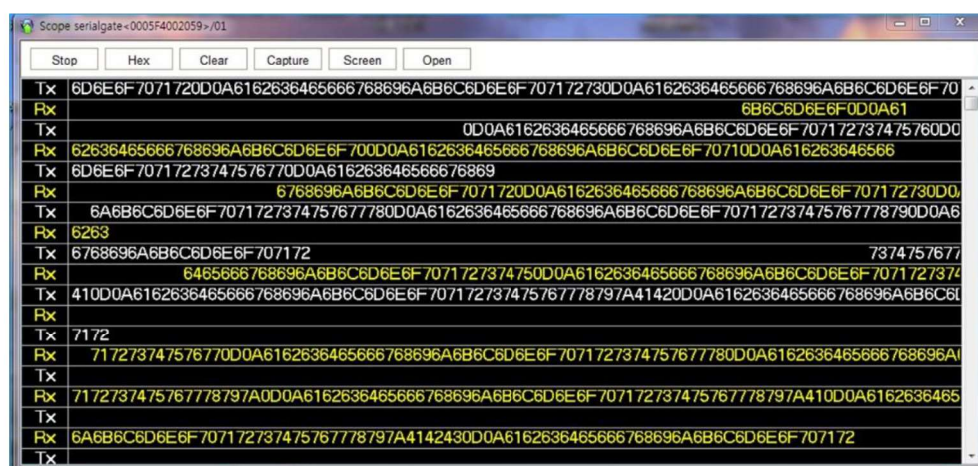


### 6.3.1 Scope Menu:

- Start/Stop: Starts or Stops scoping the data.
- Hex/ASCII: Toggles the data type. Hex displays hexadecimal value while ASCII shows the data in ASCII format.
- Clear: Delete all values shown in the window.
- Capture: Capture and save currently displayed data into a file.
- Screen: Displayed colors for background or character can be modified here.
- Open: Open capture data file.

### 6.3.2 Start / Stop

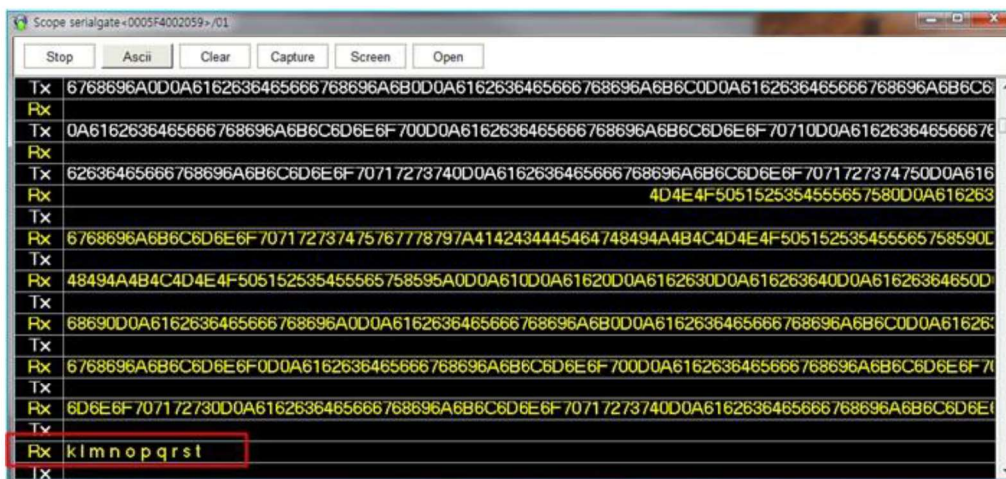
The following screen shows the scope window in hexadecimal mode. Since the scope is active the 'Stop' button is displayed. The users can click the stop button to stop scoping.



### 6.3.3 Hex / ASCII

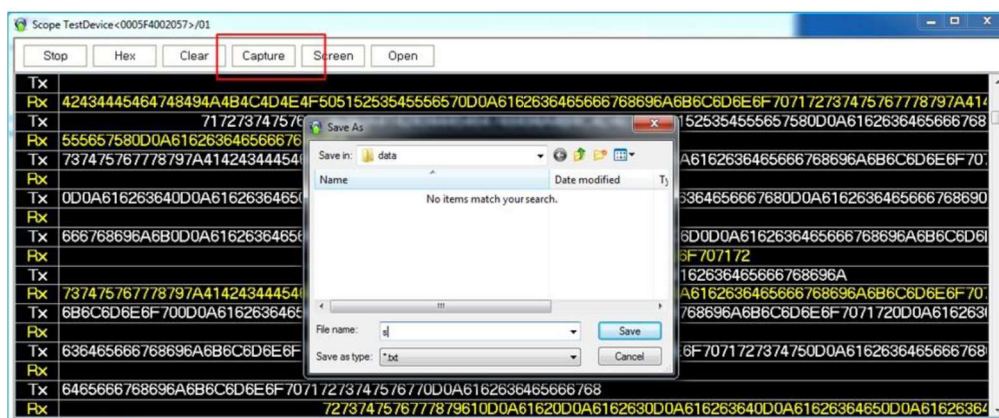
The following scope window shows the hex value of the data, but later, it shows the ASCII value.

The ASCII value was shown after the mode was changed from Hex to ASCII.



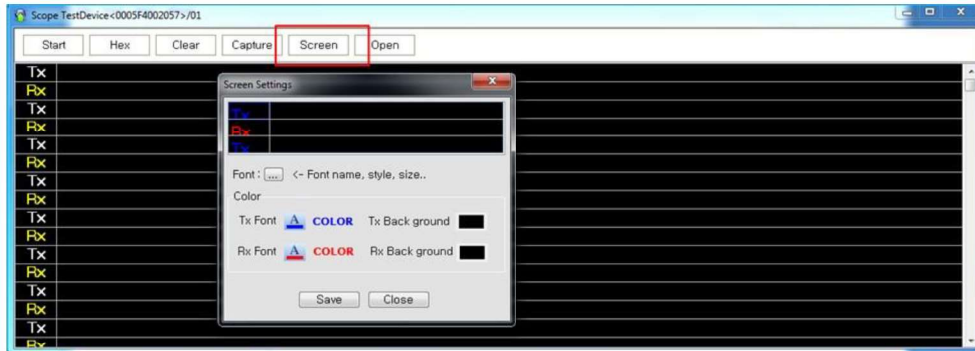
### 6.3.4 Capture Start / Stop

If the users start capturing the data and click the button again to stop it, following window will show to save the data into a file.



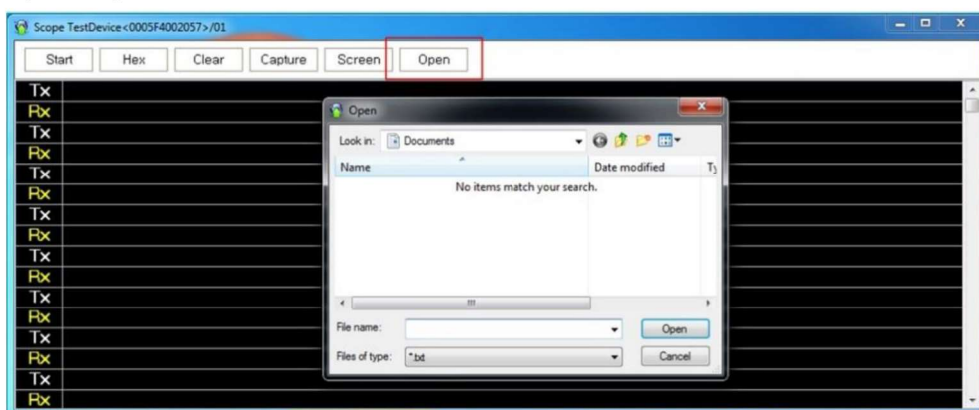
### 6.3.5 Screen

The colors in the 'Screen' window can be modified here. After changing the font and/or background color, click the 'Save' button and close it to apply the changed settings.



### 6.3.6 Open

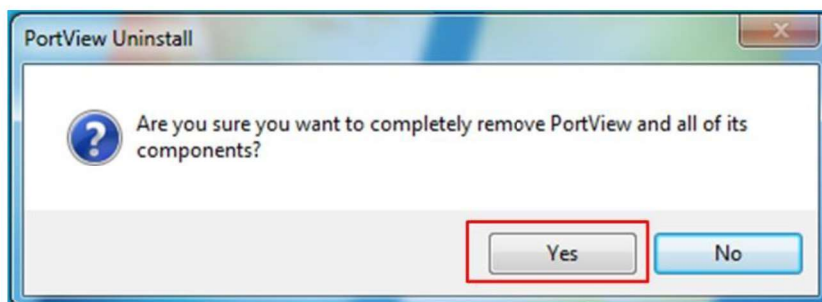
Open captured file.





## Chapter 7. Uninstall PortView

- Click 'Uninstall PortView' under PortView from the SystemBase group.
- Click 'Yes' when following message is displayed.



- If the following message is displayed, uninstall process was successful. Click 'OK' to close the windows.

