



# **Serial Manager©**

## **User's Manual**



v. 1.1  
April 2013

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# 1 Preface

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## **Purpose of the Manual**

This manual supports you during the installation and configuring of **Serial Manager©**, as well as it explains some technical options available with the mentioned product. As such, it contains some advanced network management knowledge, instructions, examples, guidelines and general theories designed to help users manage this device and its corresponding software; a background in general theory is a must when reading it. Please refer to the Glossary for technical terms and abbreviations.

## **Who Should Use This User Manual**

This manual is to be used by qualified network personnel or support technicians who are familiar with network operations; it might be useful for system programmers or network planners as well. This manual also provides helpful and handy information for first time users. For any related problems please contact your local distributor, should they be unable to assist you, please redirect your inquiries to [www.atop.com.tw](http://www.atop.com.tw) or [www.atop-tech.com/](http://www.atop-tech.com/).

## **Supported Platform**

This manual is designed for **Serial Manager©** our software for industrial control and communications and that software only.

## **IMPORTANT NOTICE**

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## 2 Introduction

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**Serial Manager©** is a utility developed by Atop Technologies, a special tool for device management and configuration for our products. It is used for daily management on various Atop network devices' settings as

- ◆ Address search
- ◆ Device positioning (physical positioning)
- ◆ Parameter configuration
- ◆ Firmware download

### System Requirements

- ◆ Windows 8/7/2008/Vista/2003/XP/2000/NT

---

**Note:** all the figures herein are intended for illustration purposes only. This software works only on certain Atop devices.

---

### 3 Installing Serial Manager©

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Your utility can be installed from the CD that comes in your product package or you can download it from one of our websites [www.atop.com.tw](http://www.atop.com.tw) or [www.atop-tech.com](http://www.atop-tech.com). Once on your PC, proceed to install it with just double clicking on the **Serial Manager©** program icon which should like this,.

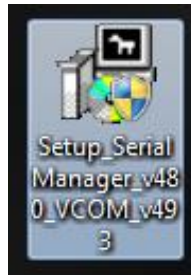


Figure 3.1

For Win7 users it is strongly recommended to allow the program to run in Compatibility Mode; right click over the Serial Manager© program icon → Properties → click on the Compatibility tab and tick on the “Run this program in compatibility mode for” box and also tick on the “Run this program as an administrator” box; just click OK and proceed to install the program.

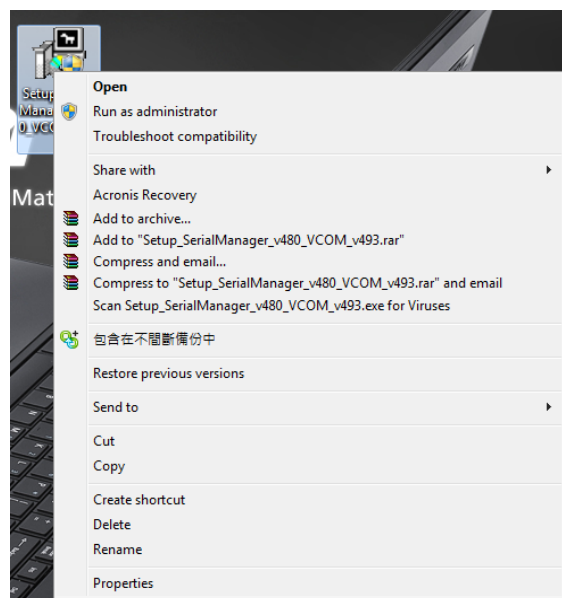


Figure 3.2



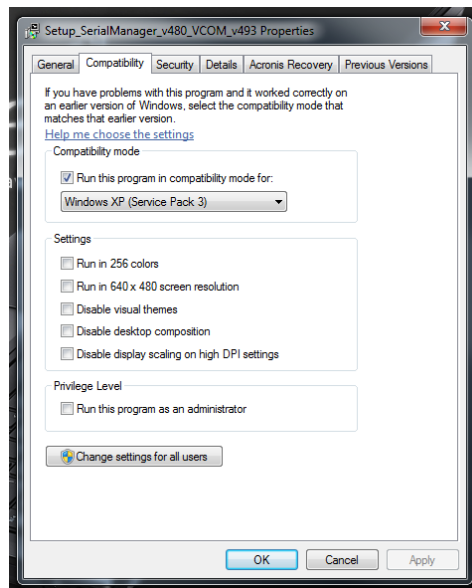


Figure 3.3

## Installation Steps

- ◆ Once clicked a pop out window will appear as follows, Figure 3.4

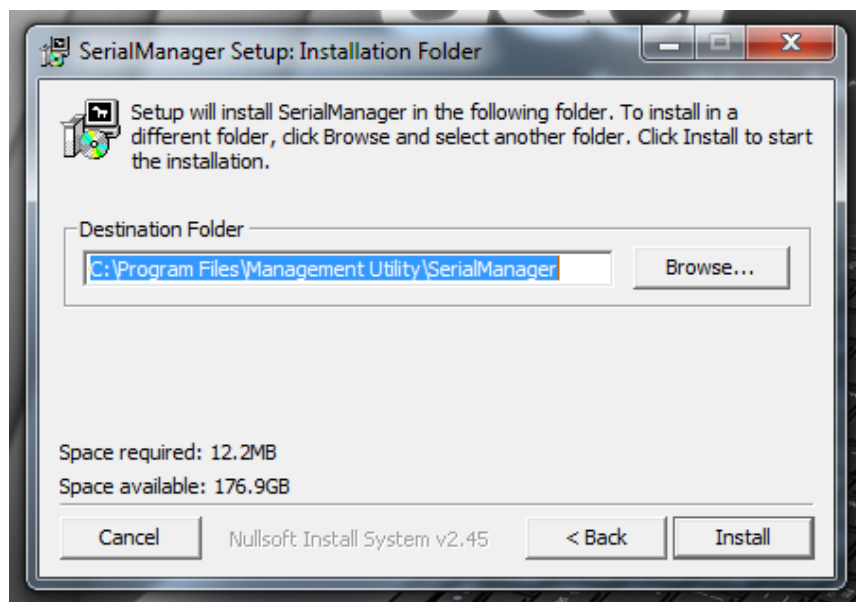


Figure 3.4

- ◆ Click to install and that's it! You have installed **Serial Manager**© into your system.
- ◆ The installer will also prompt you to install/upgrade Serial/IP. This is the Virtual COM software that our devices use. Refer to the device's User's Manual for more information on how to use this software.

## 4 Interface

The operating interface of **Serial Manager©** is as follows, Figure 4.1:

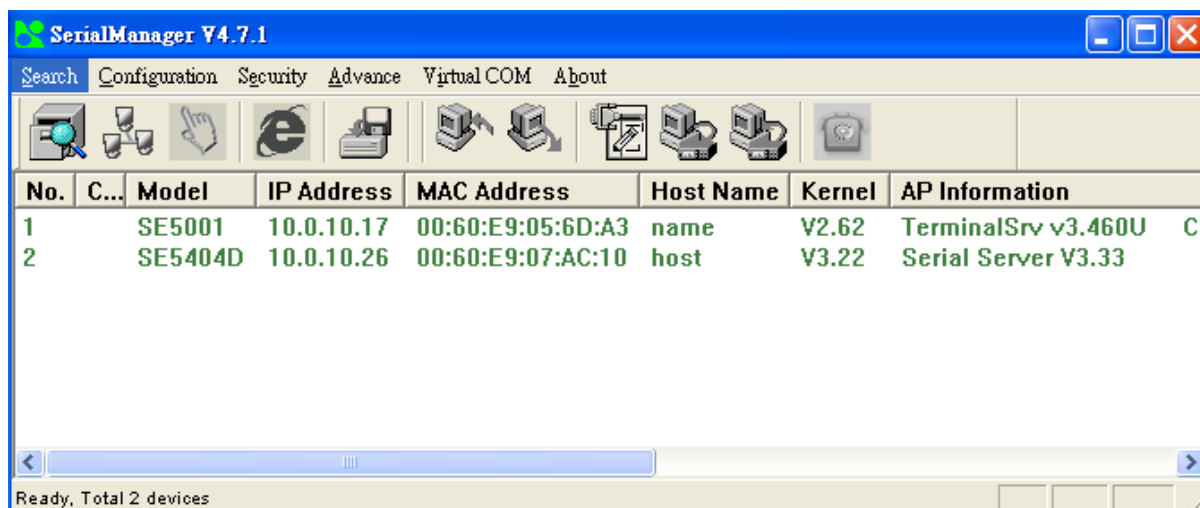


Figure 4.1

Caution fields are divided into Notes and Problems, meanings are described in the table below:

Caution Field	Description
Problems	
!	IP conflict. There are two devices with the same IP address in the network.
?	MAC conflict. There are two devices with the same MAC address in the network.
Notes	
@	The device is using DHCP.
<	The device is being located.
+	The device has been logged in.

Solutions for the problems encountered above will depend on the nature of each one, but before attempting the solutions listed below please proceed to first **“Rescan”** the network with the **Rescan icon** (See [Rescan](#)). If this fails, the solutions for each problem are respectively on the following table.

Issue	Solution
!	IP conflict; you should reconfigure the device for having one non-conflicting IP.
?	MAC conflict; MAC address should be unique in the world. You should call your representative for help or contact Atop immediately

## 5 Functions

### 5.1 Device Search

This function is applied when searching all devices in the network. There are three methods to search devices,

- ◆ Broadcast Search
- ◆ Search by IP addresses
- ◆ Search by MAC addresses
- ◆ Add a device
- ◆ Exit

To select the search methods, users click the “**Search**” option on the main menu which is shown below, Figure 5.1.

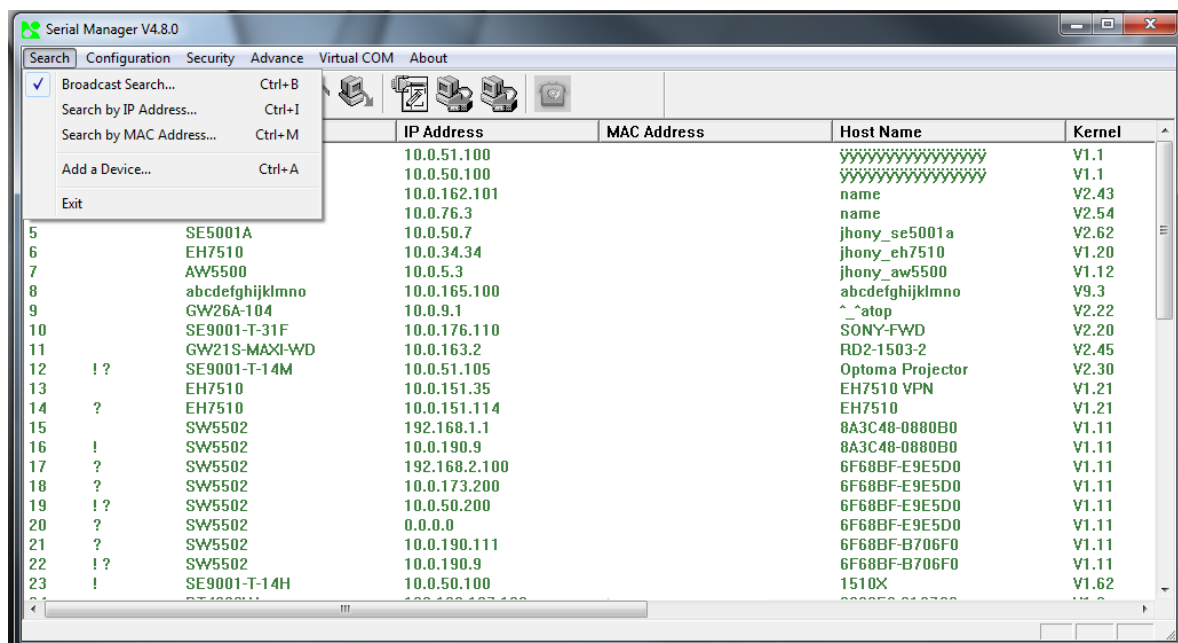


Figure 5.1

### 5.1.1 Broadcast Search

This type of search is done by sending a broadcast packet that tells all devices present in the network to reveal their presence. If the broadcast is not allowed in the network (a switch/router is not forwarding the packet), then you can consider [searching by the IP of that device](#).

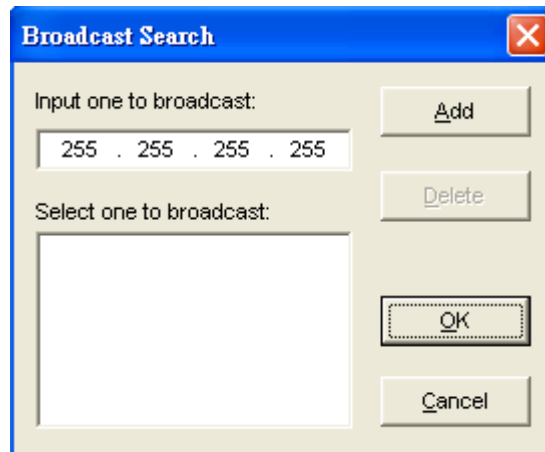


Figure 5.2

### 5.1.2 Search by IP Address

A function in a similar way as Broadcast Search, but the search will only send unicast packets to the requested IP. In other words, only the device belonging to the specified IP range will be looked upon. Entering an IP range is allowed as well, but keep in mind that all devices belonging to that range will be searched. In order to prevent flooding, please be conservative when specifying the IP range, Figure 5.3.

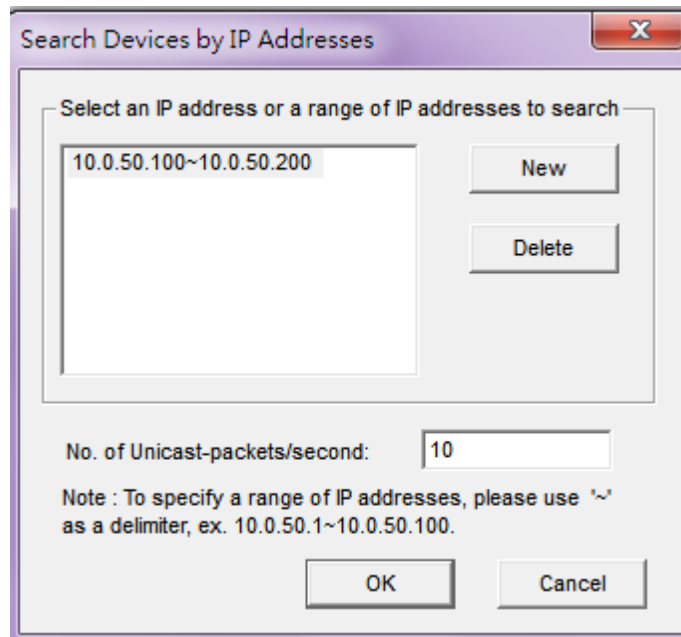


Figure 5.3

### 5.1.3 Search by MAC Address

A function in a similar way as Broadcast Search, but the search is filtered by specifying the MAC Address; in other words, only the device belonging to a specified MAC Address will be shown, Figure 5.4.

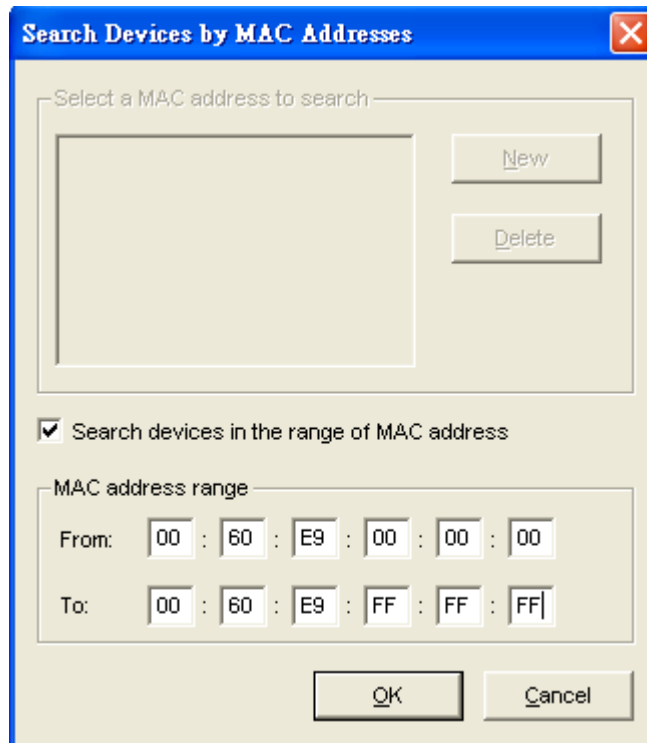


Figure 5.4

### 5.1.4 Add a device

This option is to manually add a device to **Serial Manager©** list if that device's Network information is known. After the device is added, you would be able to upgrade, configure, and manage its overall settings, Figure 5.5.

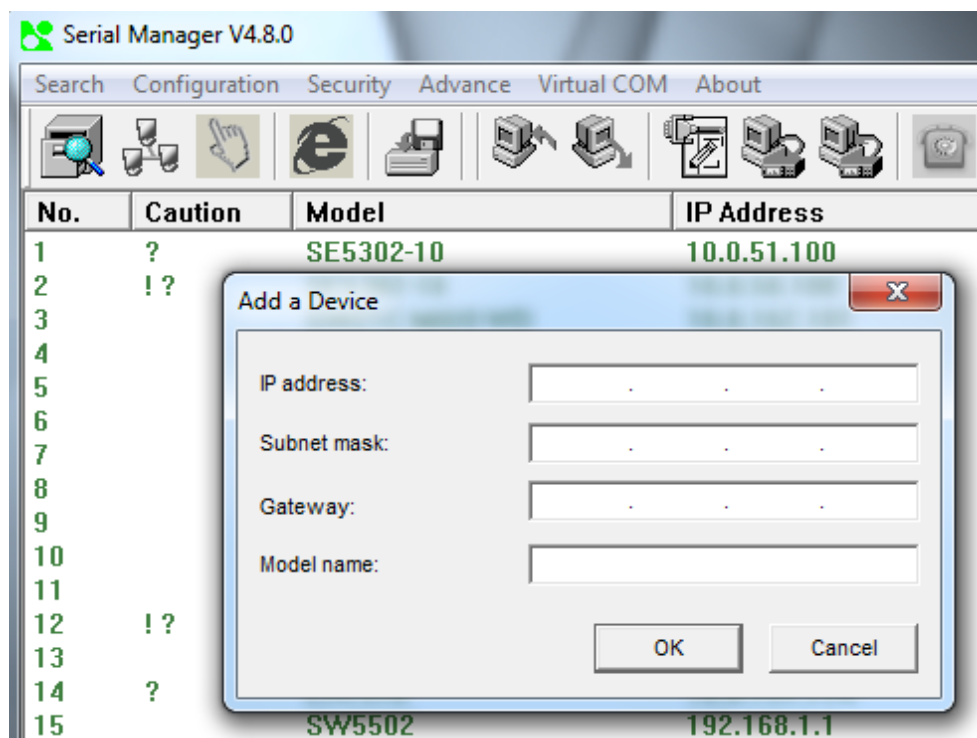


Figure 5.5

### 5.1.5 Exit

As the name implies, used to exit **Serial Manager©**.

### 5.1.6 Rescan

This option tells **Serial Manager©** to search for devices in the vicinity; it can be reached by clicking on the first icon on the toolbar, Figure 5.6.



Figure 5.6

By clicking Rescan, you will be able to scan the network according to the current selected search method (please take a look at the Functions section).

Configuration

A number of options are available:

- ◆ Network
- ◆ SNMP
- ◆ COM Port
- ◆ Locate
- ◆ Reboot
- ◆ Import Settings
- ◆ Export Settings
- ◆ Configure by Browser
- ◆ Configure by Telnet
- ◆ Options

For setting the device's parameters, import/export of those and setup; for a correct use of the options contained in it, first highlight the device to be configured, Figure 5.7

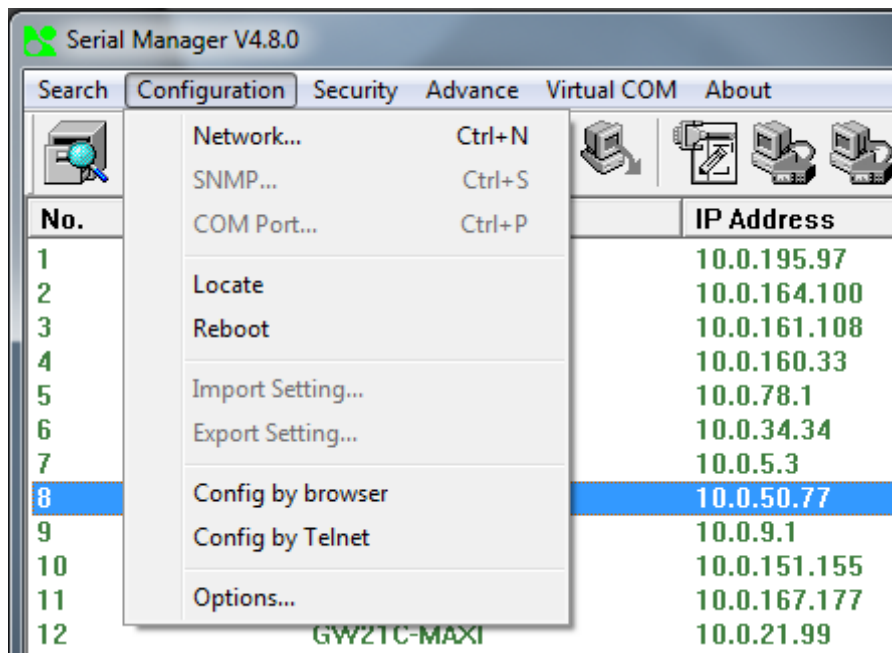


Figure 5.7



## 5.1.7 Network

In this section you can modify the following parameters:

- ◆ IP Address
- ◆ Subnet mask
- ◆ Gateway
- ◆ Host name

You can as well choose whether to obtain an IP automatically or not by checking the box that appears in the pop-out window, Figure 5.8.

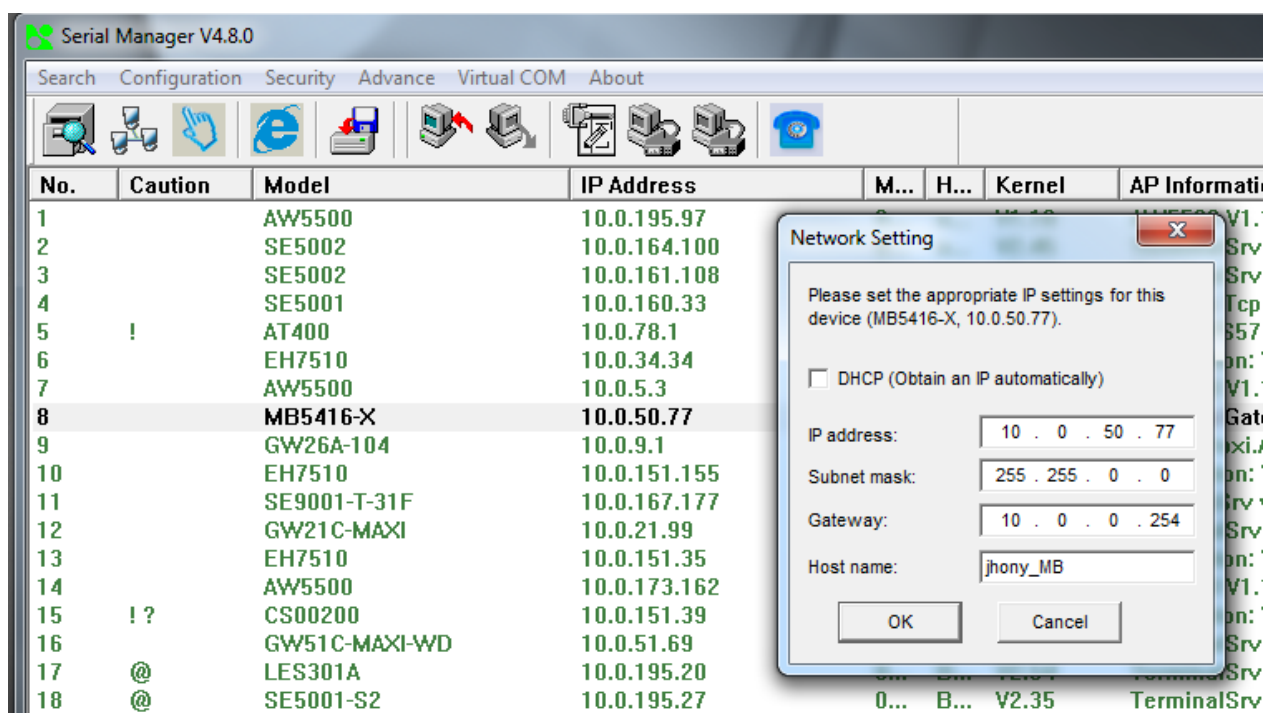


Figure 5.8

It is analogous to the following icon on the toolbar,



Figure 5.9.



Figure 5.9



### 5.1.8 SNMP

The support SNMP fields are Name, Location, and Contact.



Figure 5.10

### 5.1.9 COM Port

This option allows the user to configure the COM port without entering the Web UI. Refer to the manual for explanation on the options and additional settings available on the Web UI. Select several devices at once to carry out the configuration on them at the same time by selecting **“Apply for all selected devices with the same model”**.

COM Ports Setting (SW5502, 10.0.10.20)

COM1

Link mode:

☒ TCP server mode ☐ TCP client mode ☐ UDP mode

Local port: 4660 Connection limit: 1

☐ IP Filter:

☐ Enable virtual COM mode

Apply to all serial ports

COM property: Apply to all serial ports Refresh

Port type:

☒ RS232 ☐ RS422 ☐ RS485

Baud rate:

☐ 300 ☒ 9600 ☐ 230400

☐ 600 ☐ 19200 ☐ 460800

☐ 1200 ☐ 38400 ☐ 921600

☐ 2400 ☐ 57600

☐ 4800 ☐ 115200

Data bits:

☐ 5 bits ☐ 7 bits

☐ 6 bits ☒ 8 bits

Parity:

☒ None

☐ Odd

☐ Even

☐ Mark

☐ Space

Stop bits:

☒ 1 ☐ 2

Packet delimiter(Network to Serial):

☒ Timer ☒ Enable

32772 (10-30000msec)

☐ Characters

Packet delimiter(Serial to Network):

☒ Timer ☐ Enable

10 (10-30000msec)

☐ Characters

Flow control:

☒ None

☐ Xon/Xoff

☐ RTS/CTS

Advanced Delimiter Settings

\*\*\* Note: If a parameter or an option is missing, please configure it by web browser.

☐ Apply for all selected devices with the same model

OK Cancel

Figure 5.11

### 5.1.10 Locate

Enables you to locate physically the device's position, once clicked it will command the device to emit a series of intermittent beeps, you can stop the beeping by clicking one more time on it. This option is analogous to the one in the toolbar, Figure 5.12.



Figure 5.12

### 5.1.11 Reboot

As its name implies, its function is to restart any device sensed on the network. Usually a device will restart after parameters are changed as well, Figure 5.13.

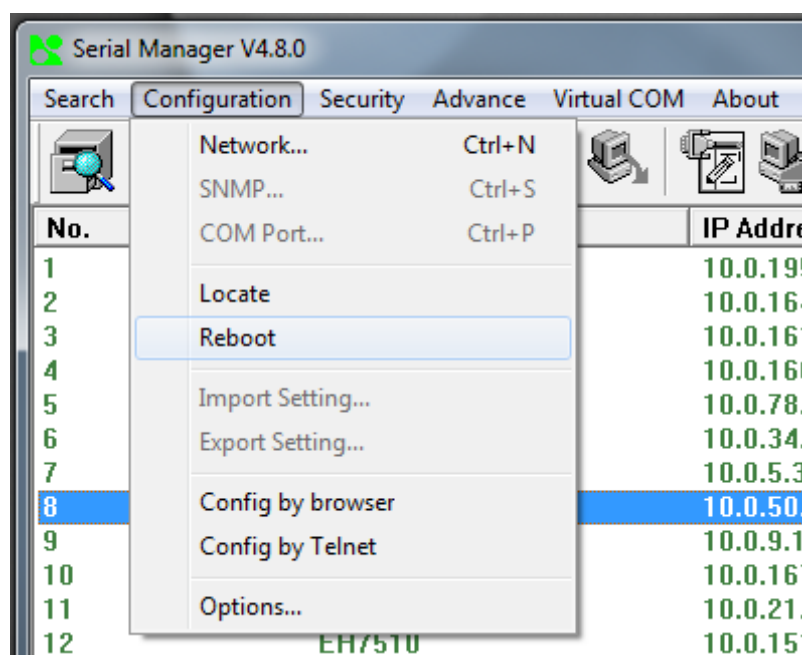


Figure 5.13

It will prompt you to enter as the device's administrator, Figure 5.14.

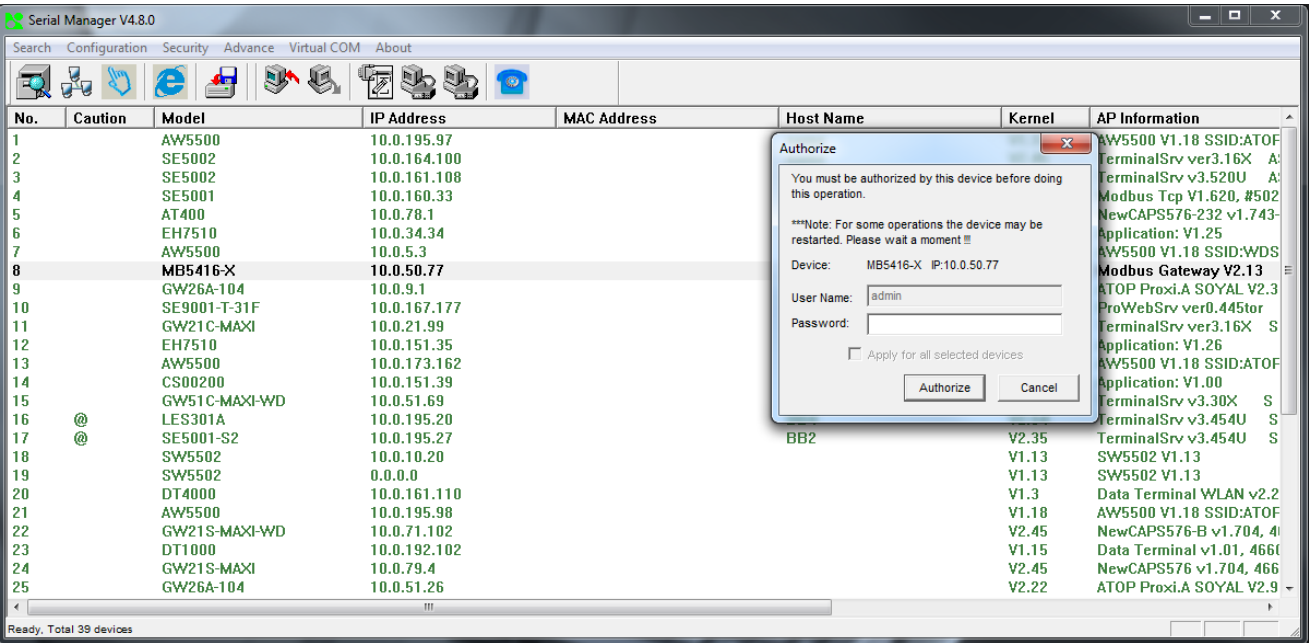


Figure 5.14

5.1.12 Import Settings

Allows you to import previous settings saved or created for your device, also available on the icon bar as in Figure 5.15.



Figure 5.15

Just click on it and follow the instruction which will ask you for the path to the file, Figure 5.16.

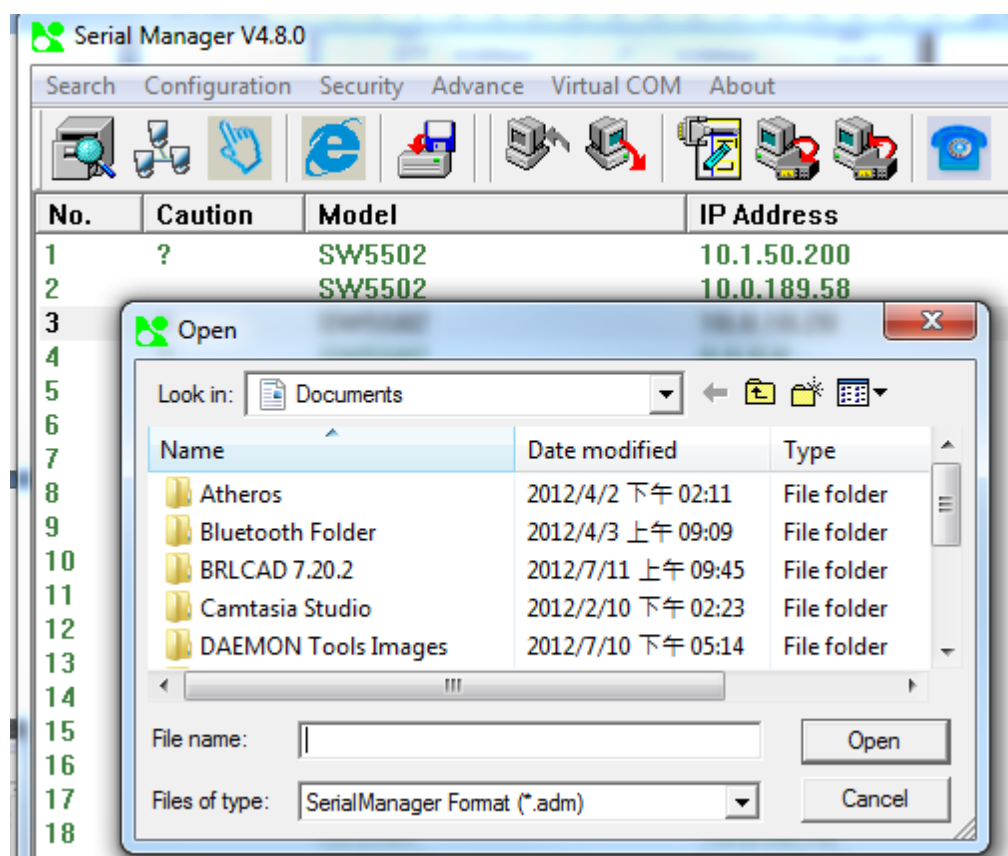


Figure 5.16

**Import a file to SW5502**

Open a file:  ...

Model: SW5502

**IP setting:**

IP address:

Subnet mask:

Default gateway:

**SNMP setting:**

Name: 7F68BF-D3B6

Location: location

Contact: contact

**COM ports setting:**

Selected COM Port:  ▼

Type: RS232 Alias name:

Baud rate: 9600 Data bits: 8 bits

Stop bits: 1 bit Parity: None

Flow control: None

Packet delimiter(Network to Serial): 32772 ms

Packet delimiter(Serial to Network):

Link mode: TCP server mode / Virtual COM: Disabled

Local port: 0

Max connections: 0

☐ Apply for all selected devices with the same model

☐ Popup this dialog while importing settings to the next device

OK Cancel

Figure 5.17

Choose the file to be uploaded and confirm the settings, then press OK to load the settings and finish importing.



### 5.1.13 Export Settings

Allows you to export (or save) your device's settings, also available on the icon bar as in Figure 5.18.

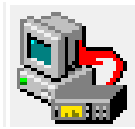
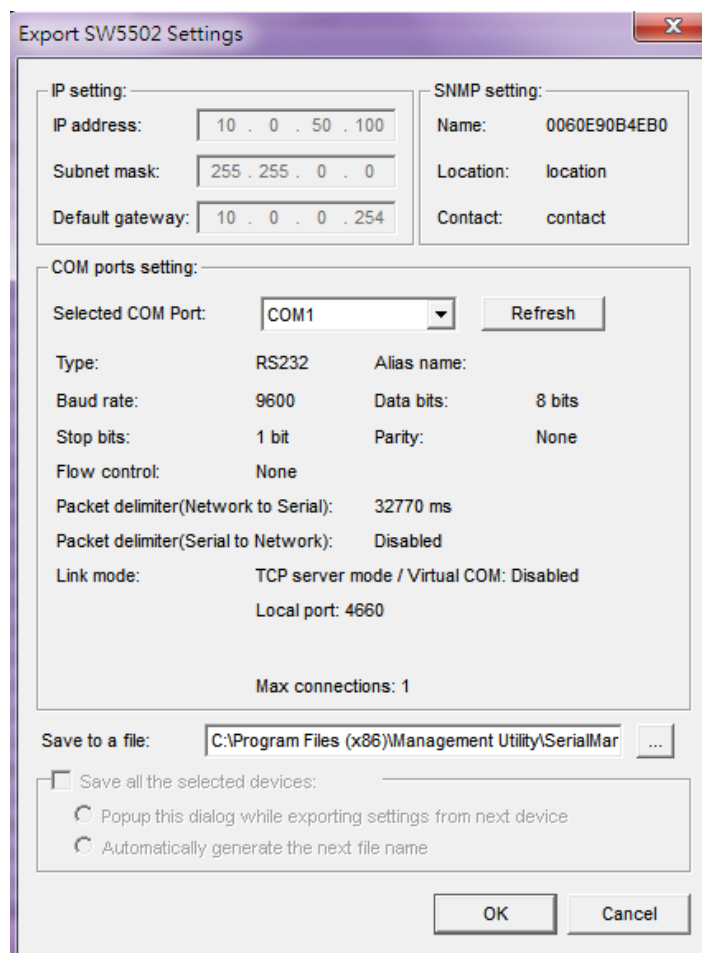


Figure 5.18

Again, choose the file path for the file and confirm the settings, then press OK to save the settings and finish this step.



**Export SW5502 Settings**

**IP setting:**  
IP address: 10 . 0 . 50 . 100  
Subnet mask: 255 . 255 . 0 . 0  
Default gateway: 10 . 0 . 0 . 254

**SNMP setting:**  
Name: 0060E90B4EB0  
Location: location  
Contact: contact

**COM ports setting:**  
Selected COM Port: COM1 Refresh  
Type: RS232 Alias name:  
Baud rate: 9600 Data bits: 8 bits  
Stop bits: 1 bit Parity: None  
Flow control: None  
Packet delimiter(Network to Serial): 32770 ms  
Packet delimiter(Serial to Network): Disabled  
Link mode: TCP server mode / Virtual COM: Disabled  
Local port: 4660  
Max connections: 1

Save to a file: C:\Program Files (x86)\Management Utility\SerialMar ...

☐ Save all the selected devices:  
☐ Popup this dialog while exporting settings from next device  
☐ Automatically generate the next file name

OK Cancel

Figure 5.19

### 5.1.14 Configure by Browser

Some devices are supplied with build-in Web servers, which will be used in a similar way as **Serial Manager©**. Users can carry out any parameter setting directly through the submenu option “**Config by Browser**”, and a Web browser window will pop-out, as shown in the figure below, Figure 5.20.

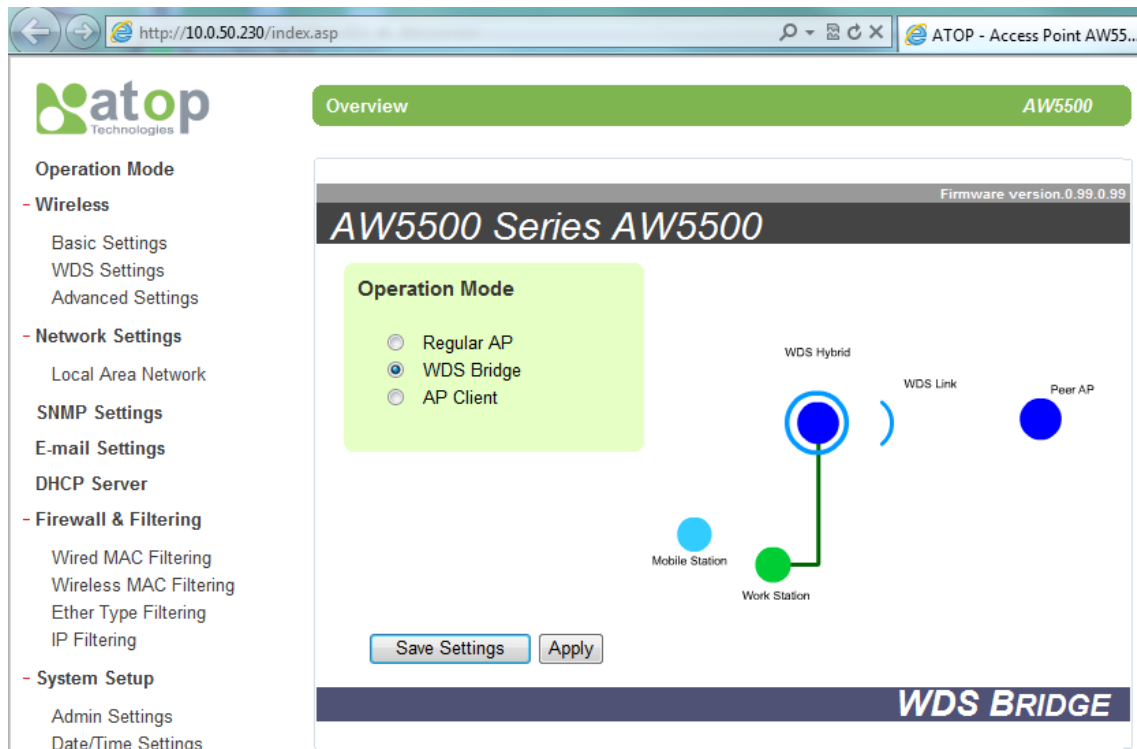


Figure 5.20

It can also be accessed by clicking the following icon in the toolbar,



Figure 5.21

### 5.1.15 Configure by Telnet

Some devices have the option to be configured by **Telnet**, i.e., a command line interface that allows you to modify some settings in your device. When this option is clicked on, a pop-out window will appear, Figure 5.22.

Please be aware that Windows Vista / Windows 7 or higher do not have Telnet client installed by default, to install Microsoft Telnet client on these systems:

1. Click **Start**, and then click **Control Panel**.
2. On the **Control Panel Home** page, click **Programs**.
3. In the **Programs and Features** section, click **Turn Windows features on or off**.
4. If the **User Account Control** dialog box appears, confirm that the action it displays is what you want, and then click **Continue**.

In the **Windows Features** list, select **Telnet Client**, and then click **OK**.

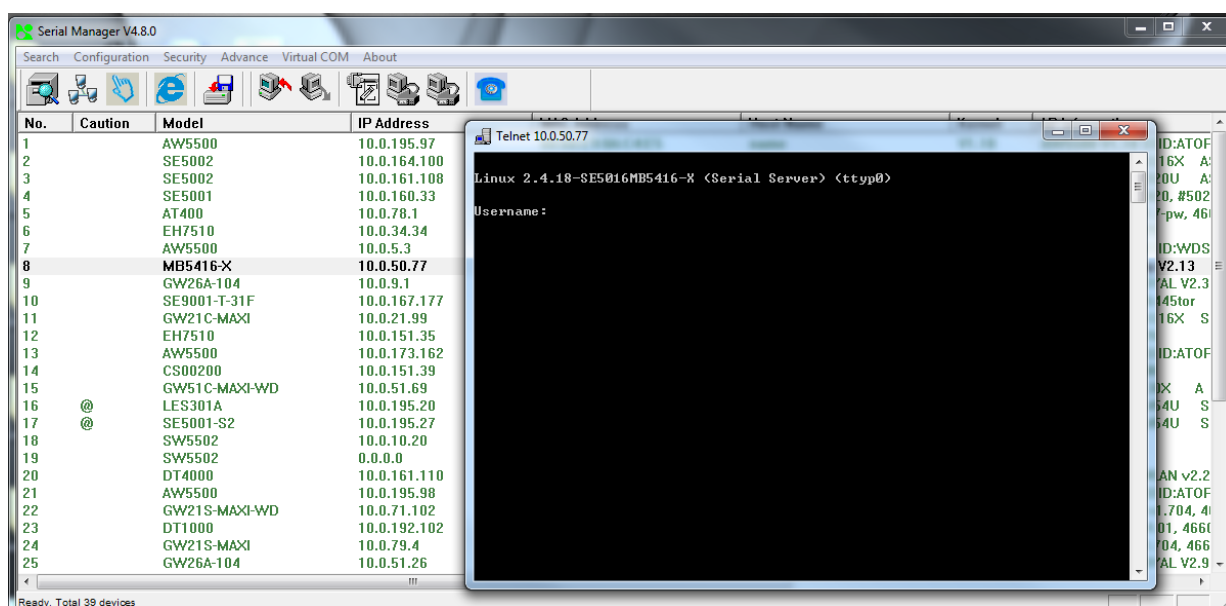


Figure 5.22

It can also be accessed by clicking the following icon on the toolbar, Figure 5.23.



Figure 5.23

## 5.1.16 Options

It is mainly applied for setting some common **Serial Manager©** working rules, such as device's search time interval or whether to display information tips, Figure 5.24.

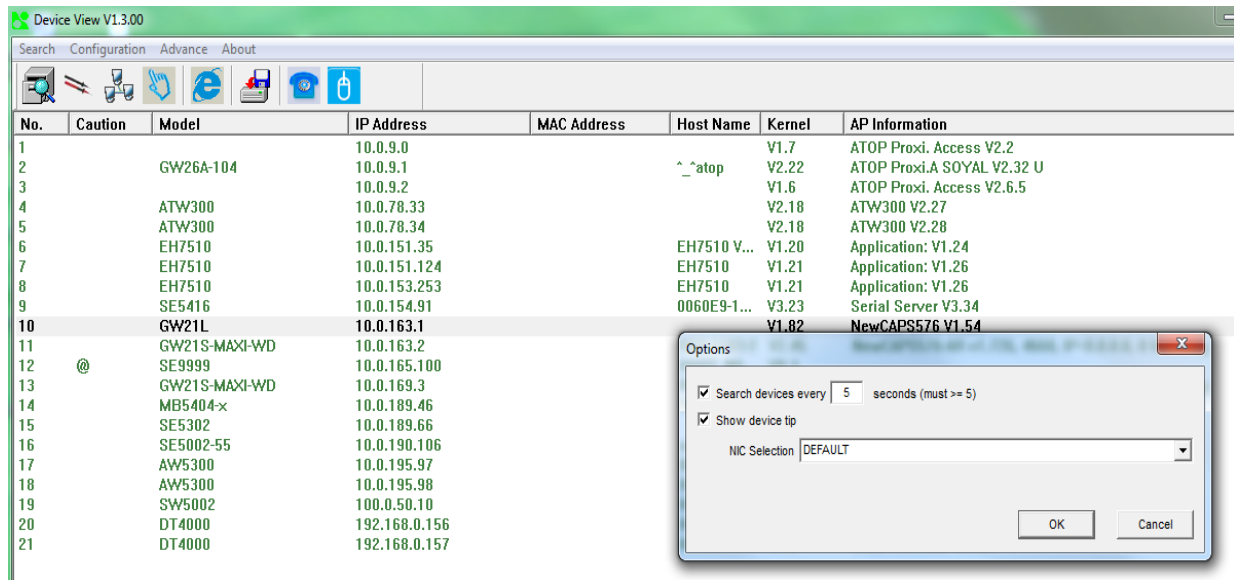


Figure 5.24

There are two more choices on this sub menu,

- ◆ **Search devices every** ☐ **seconds**, in which **Serial Manager©** will “scan” the network per specified interval.
- ◆ **Show device tip**, which when enabled will show tooltips when the mouse pointer stays on the device's entry after 2 seconds.
- ◆ **NIC Selection**, in which you can select which Network Interface Card **Serial Manager©** should use.

## 5.2 Security

Security features for accessing the device are in this section:

- ◆ Login
- ◆ Logout
- ◆ Change Password

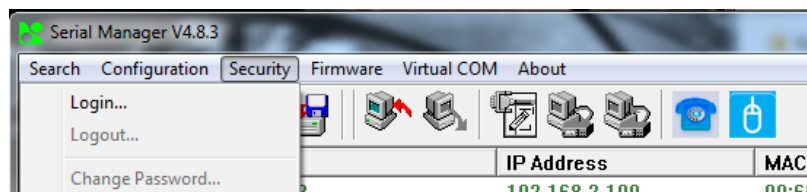


Figure 5.25

### 5.2.1 Login

It is necessary to login the device before sensitive functions will enable on the UI. It is also available through the icon bar, Figure 5.26 or by double clicking on the device.



Figure 5.26

### 5.2.2 Logout

As stated, for logging out of the device highlighted/selected; it is also in the icon bar, Figure 5.27.



Figure 5.27

### 5.2.3 Change Password

This option allows you to change the administrator's password directly on the device instead of going through the Web interface.

## 5.3 Firmware

Updates (for firmware and kernel), are announced from time to time for all our devices, the process is simple and straightforward. First download the upgrade from our website [www.atop.com.tw](http://www.atop.com.tw) , save it somewhere in your computer where is easily accessible; after that open your **Serial Manager©** utility. You can either go to **Firmware** → **Firmware Download**; a pop-out window will appear then as the figure below, Figure 5.28.

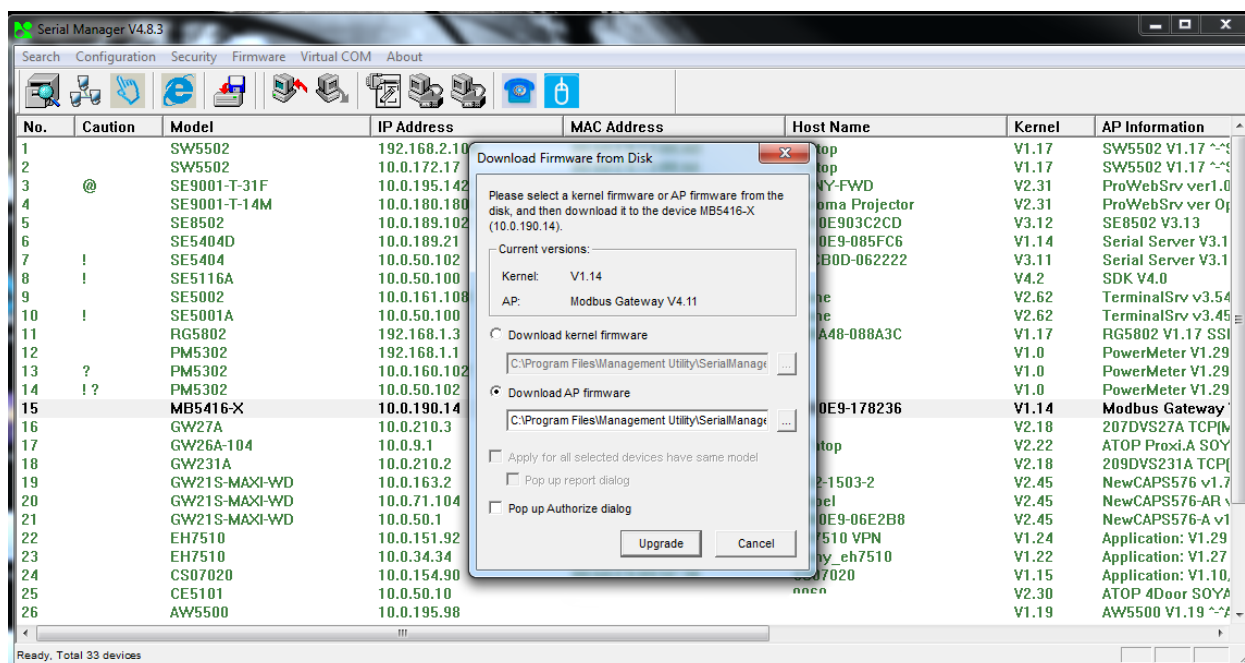


Figure 5.28

Choose whether to update the kernel or firmware → the path that takes you to your downloaded file (a pop-out window will appear at this point), Figure 5.29.

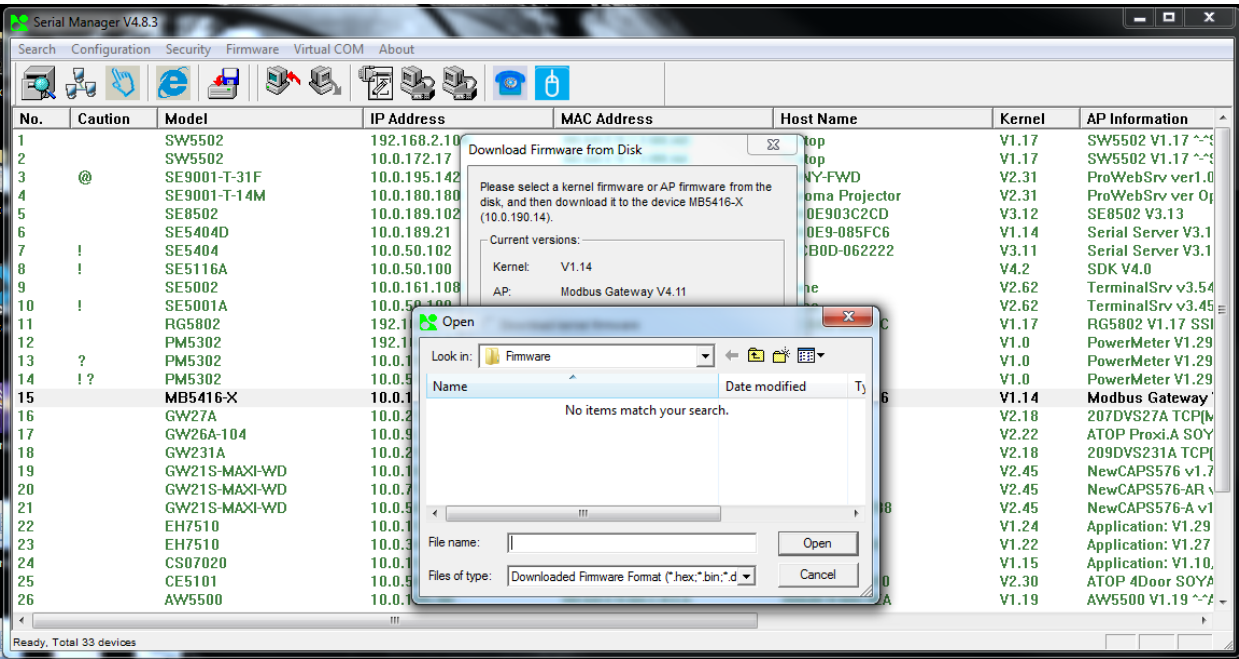


Figure 5.29

Click on “Open” → Upgrade and that’s it.

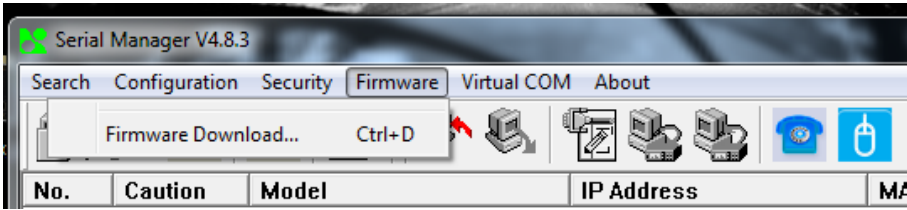


Figure 5.30

Alternatively you can type on your keyboard **Ctrl + D** (as specified in the picture above, Figure 5.30), or click on the **Upgrade from Disk** icon on the toolbar, Figure 5.31



Figure 5.31

## 5.4 Virtual COM

For the device that supports this function, Virtual COM can be configured inside Serial Manager without going to Serial/IP's Control Panel. Major Virtual COM options were integrated into Serial Manager to make configuration easier.

In this section, you will find the following:

- ◆ Show Configuration
- ◆ Add devices
- ◆ Add device (Manually)
- ◆ Remove devices
- ◆ Port Enable
- ◆ Port Disable
- ◆ Apply
- ◆ Serial/IP Tools

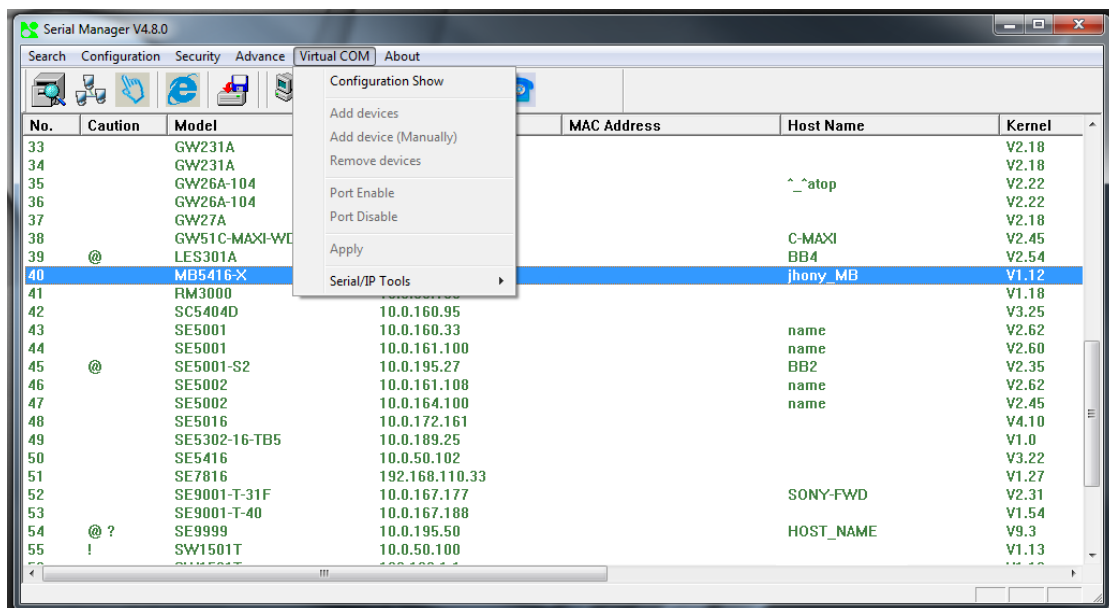


Figure 5.32

### 5.4.1 Show Configuration

A new Virtual COM working area would appear after "Show Configuration" is clicked.



## 5.4.2 Add devices

Select a device you want to establish a Virtual COM connection with, you can select multiple devices. After the device is selected, right click in the blank working area and select “Add devices”.

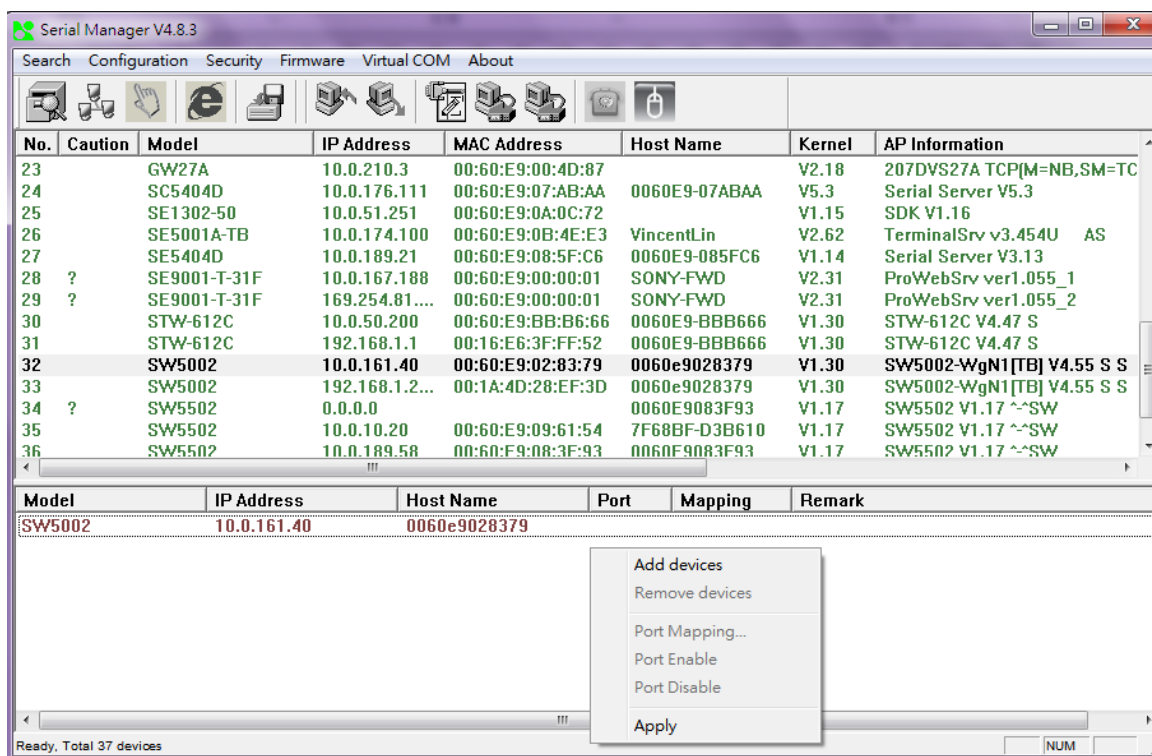


Figure 5.33

### 5.4.3 Remove devices

You can remove the device from the Virtual COM working area by selecting “Remove devices.”

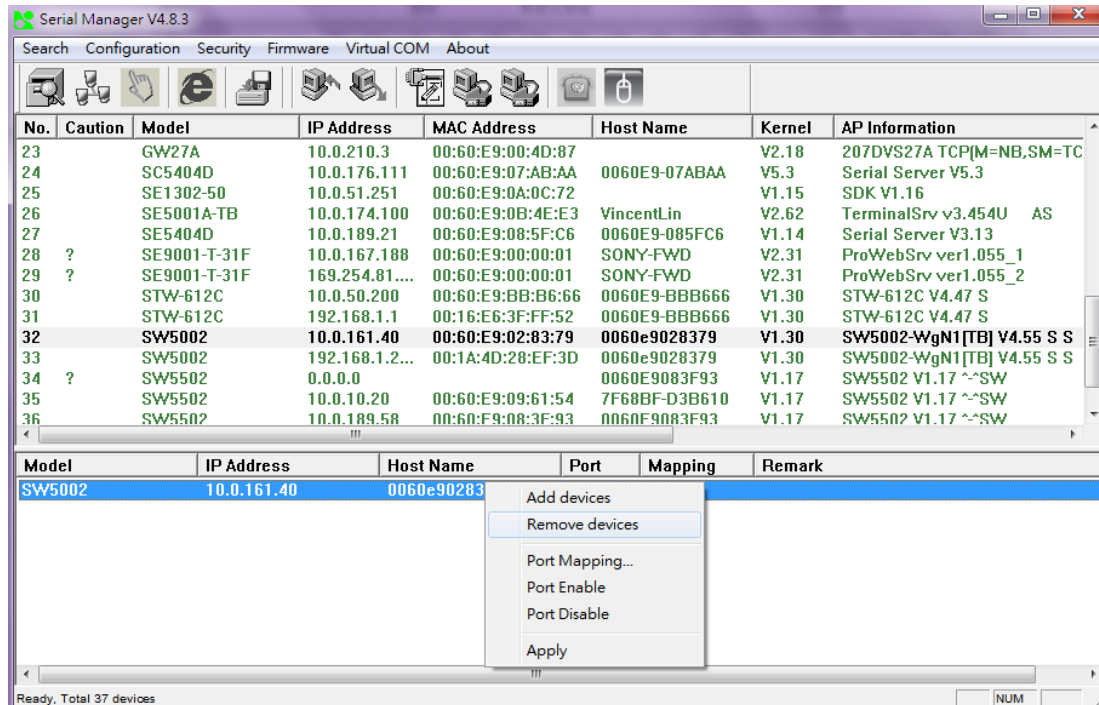


Figure 5.34

### 5.4.4 Port Mapping

If you do not like the default Virtual COM port settings supplied by Serial Manager when adding the port, you can select Port Mapping and configure it manually.

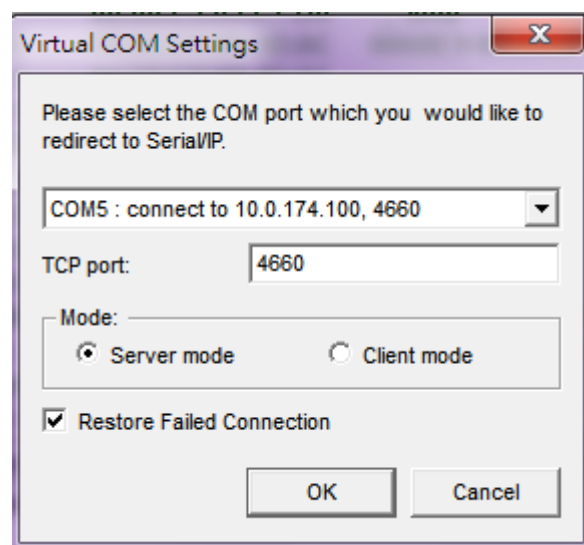


Figure 5.35

### 5.4.5 Port Enable

You can enable Virtual COM for a specific port by selecting “Port Enable”. The ports enable automatically when they are added. This option is available once **Show Configuration** has been used.

### 5.4.6 Port Disable

You can disable Virtual COM for a specific port by selecting “Port Disable”. As the last option, it is available once **Show Configuration** has been used.

### 5.4.7 Apply

Remember to click **Apply** to apply any changes.

### 5.4.8 Serial/IP Tools

In this section, you will find options to open external Serial/IP Control Panel, Port Monitor, and Trace Window.

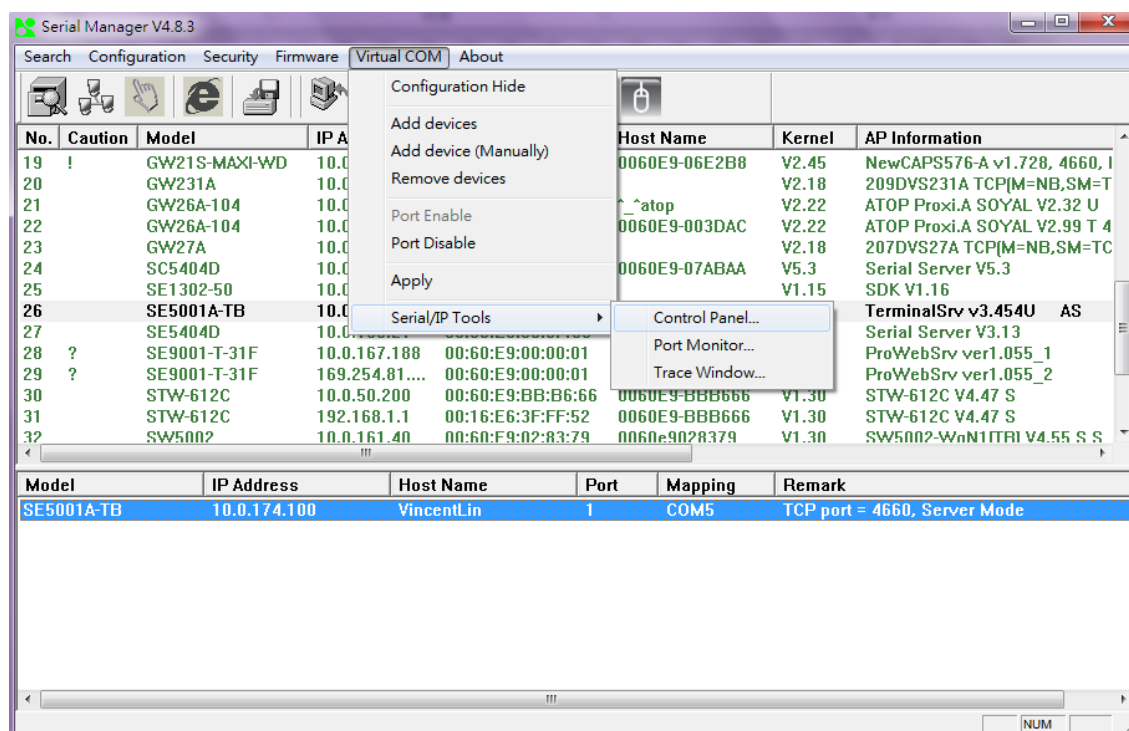


Figure 5.36

## 5.5 About

This option is for showing software and contact information, Figure 5.37.

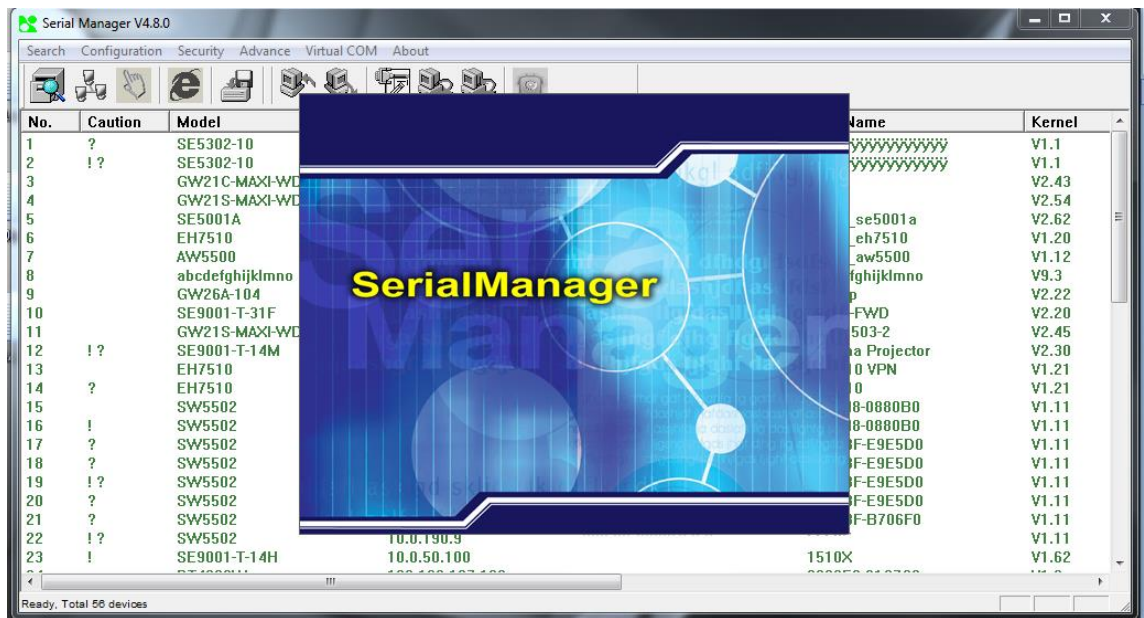


Figure 5.37