

Advantech AE Technical Share Document

Date	02/02/2016	Release Note	<input type="checkbox"/> Internal <input checked="" type="checkbox"/> External
Category	<input type="checkbox"/> FAQ <input checked="" type="checkbox"/> SOP	Related OS	Windows OS
Abstract	How to set up device server/Modbus GW configuration in Web-Based interface		
Keyword	Device Server, Modbus Gateway, web configuration		
Related Product	EKI-152x-AE/BE, EKI-122x-AE/BE, Adam-4570/1/2 series		

■ Problem Description:

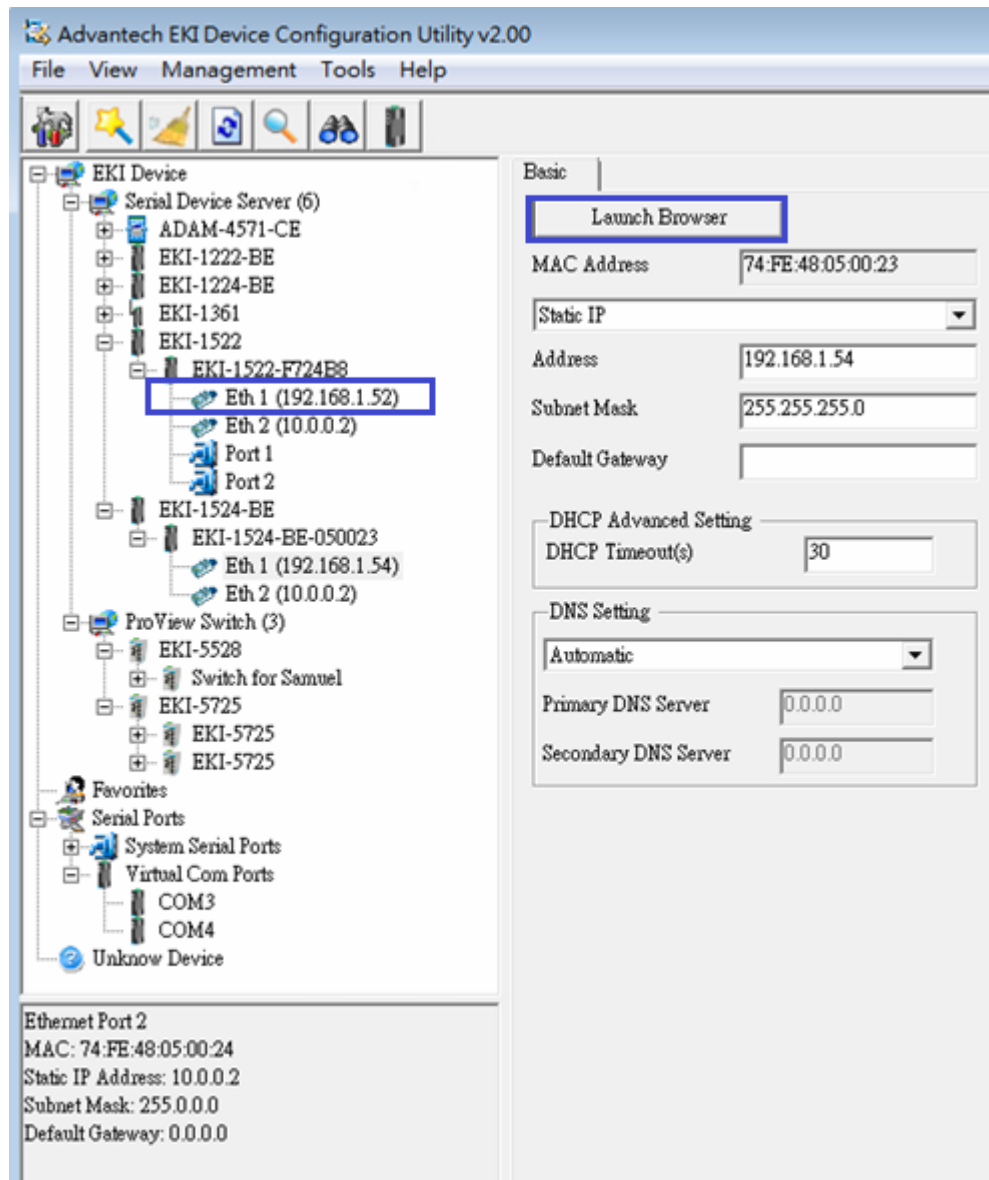
This SOP would help customer to set-up our Device server & Modbus gateway (**EKI-152x-AE/BE series & EKI-122x-AE/BE series & adam-4570/1/2 series**) in web-based interface which use latest firmware and go with [Advantech EKI Device Configuration Utility 1.71 or upper version](#).

We moved most configuration into Web-Based interface except VCOM mapping. Using a standard web browser like IE/Chrome/Firefox, entered your EKI-series IP Address. The default IP address setting is **10.0.0.1**(Eth1) & **10.0.0.2**(Eth2). Also you can use previously assigned IP address for this device server. Once the devices can be scan in the utility, you also can present with the following steps.

■ Brief Solution - Step by Step:

Step1: Using *Utility* enter to browser configuration setting page

Using *Advantech EKI Device Configuration Utility 2.0* to scan the attached devices. After found devices, you can click the “**Launch Browser**” in Ethernet setting to enter Web-Base setting for detail configuration.



Step2: Welcome Page

In Web Configuration interface, you can see the welcome page which shows the whole device server configuration.

And more, you can key in your previously assigned IP address in the web browser without Utility.

The screenshot shows a web browser window with the address bar containing `http://192.168.1.54/cgi-bin/index.cgi`. The browser tab is titled "EKI-1524-BE Web Server". The page header features the Advantech ICom logo. On the left, a navigation menu lists various configuration options: Home, System, Ethernet Configuration (Eth 1, Eth 2), Port Configuration (Port 1, Port 2, Port 3, Port 4), Monitor, Alarm, Syslogd (Syslogd Setting, Syslogd Message), Tools (Ping, Reboot), and Management (LogFile, Change Password, Export, Import). The main content area is titled "Welcome to EKI-1524-BE Web Configuration Server" and lists the following functions:

- System**
 - device name, device description, firmware message
- Port Configuration**
 - UART Configuration** : baud rate, parity bit, data bits, stop bits, serial type, flow control
 - Mode Configuration** : virtual COM port mode, control mode(TCP/UDP), data mode(TCP/UDP)
- Network Configuration**
 - IP address, netmask, default gateway and MAC address
- Monitor**
 - monitor port data
- Alarm**
 - mail setting, trap setting, SNMP agent setting, event setting
- Change Password**
 - change the login password
- Export**
 - export configuration file
- Import**
 - import configuration file
- Reboot**
 - after configuring, you must restart the device and the setting will take affect

At the bottom, contact information is provided: "If you need additional information : info@advantech.com.tw" and "If you wish to be contacted : sales@advantech.com.tw".

Step3: System Page

You can see the firmware version and also you can change the Device Name and Device Description on this page. And enable/disable the Telnet, and SNMP functions. Moreover, you can set the Time zone related setting.

The screenshot displays the 'System Configuration' page of the ADANTECH ICom web interface. The browser address bar shows 'http://192.168.1.54/cgi-bin/index.cgi' and the page title is 'EKI-1524-BE Web Server'. The left sidebar contains a tree view with 'System' selected. The main content area is a table with the following configuration items:

Firmware version:	1.97
Revision number	3550
Device Name	<input type="text"/>
Device Description	<input type="text"/>
Telnet	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
SNMP	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
Time Zone	(GMT)Casa blanca, Monrovia
Local Time	2016 / 1 / 31 4 : 14 : 24 Modify
Daylight Saving	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Begin Time	<input type="text"/> / <input type="text"/> Date(MM/DD)
End Time	<input type="text"/> / <input type="text"/> Date(MM/DD)
Time Server	<input type="text"/>

A 'Save' button is located at the bottom left of the configuration table.

Step4: Network Configuration Page

Click the Eth1/Eth2 Configuration, there are Net Mode, IP Address, Subnet Mask, Default Gateway and DNS. Enter the corresponding values for your network environment.

Remember press “**Save**” after fill in all values.

ADVANTECH ICom

Home

- System
- Ethernet Configuration
 - Eth 1**
 - Eth 2
- Port Configuration
 - Port 1
 - Port 2
 - Port 3
 - Port 4
- Monitor
- Alarm
- Syslogd
 - Syslogd Setting
 - Syslogd Message
- Tools
 - Ping
 - Reboot
- Management
 - LogFile
 - Change Password
 - Export
 - Import

Eth1 Configuration

Mode	Static IP
MAC Address	74-FE-48-05-00-23
IP Address	192.168.1.54
Subnet Mask	255.255.255.0
Default Gateway	
DNS	<input checked="" type="radio"/> Automatic <input type="radio"/> Specific
Current Status	
IP 1	192.168.1.54
IP 2	fe80::76fe:48ff:fe05:23

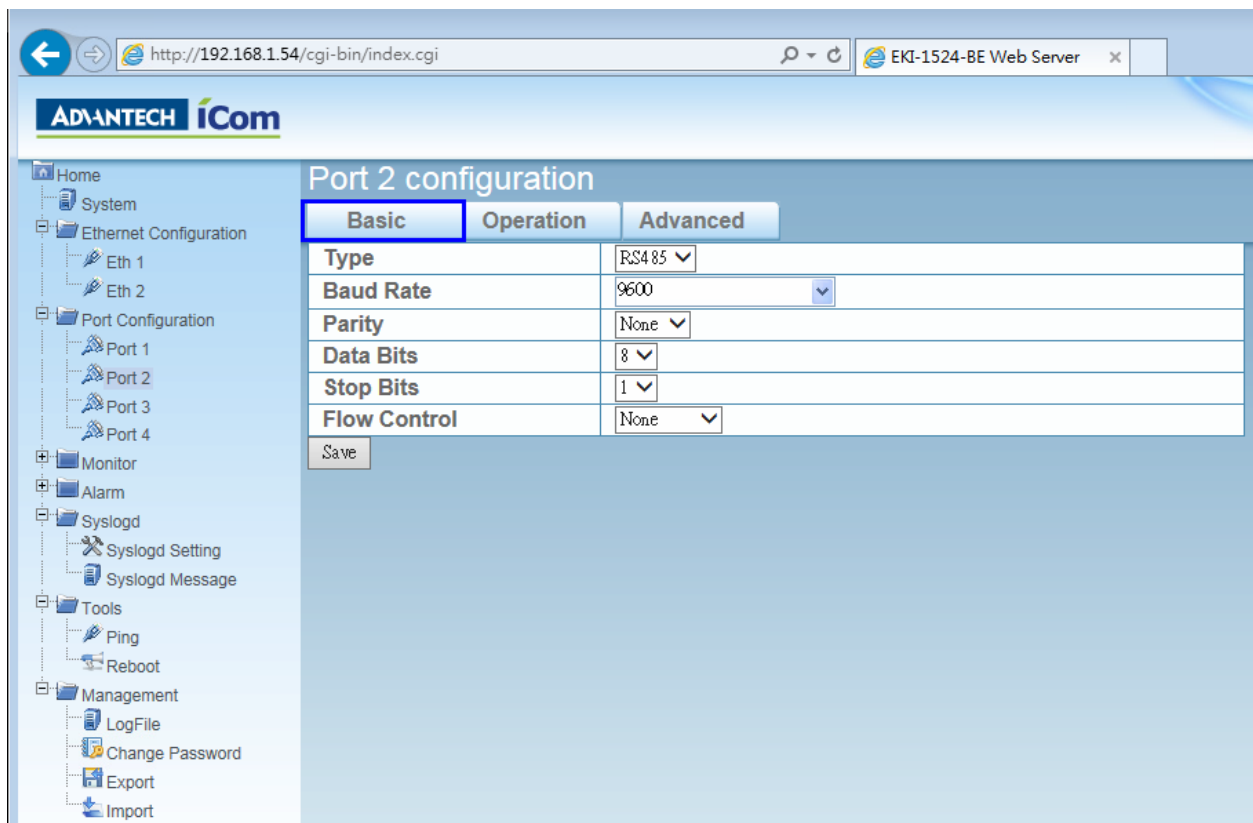
Save

Step5: Port Configuration Page –Basic Page

There are **Basic Setting**, **Operation Mode**, and **Advanced Setting** in the serial port configuration.

In the Basic Setting page, you can set up serial type, Baud Rate, Parity, Data Bits, Stop Bits, Flow Control those serial setting.

Remember press “**Save**” after fill in all values.



The screenshot displays the 'Port 2 configuration' page in the ADVANTECH iCom web interface. The browser address bar shows 'http://192.168.1.54/cgi-bin/index.cgi' and the page title is 'EKI-1524-BE Web Server'. The left sidebar contains a navigation menu with categories like System, Ethernet Configuration, Port Configuration, Monitor, Alarm, Syslogd, Tools, and Management. The main content area has three tabs: 'Basic', 'Operation', and 'Advanced'. The 'Basic' tab is active, showing a table with the following configuration parameters:

Parameter	Value
Type	RS485
Baud Rate	9600
Parity	None
Data Bits	8
Stop Bits	1
Flow Control	None

Below the table is a 'Save' button.

Step6: Port Configuration Page – Operation Page

In the Operation Page, you can set up VCOM mode, USDG Data Server Mode, USDG Data Client Mode, USDG Control Mode...etc.

Remember press “**Save**” after fill in all values.

The screenshot shows the 'Port 2 configuration' page in the 'Operation' tab. The configuration table is as follows:

Basic	Operation	Advanced
Mode	Virtual COM Mode ▾	
Host Idle Timeout(s)	60	
Response Timeout(ms)	0	
Frame Break(ms)	0	
Pack conditions (Pack sent immediately when reach 1024 Bytes)		
<input type="checkbox"/> By size	Bytes(1 ~ 1024 Bytes)	
<input type="checkbox"/> By interval	ms(1 ~ 60000 ms)	
<input type="checkbox"/> By end-character	Char Format ASCII ▾ Char Value	
RVCOM Extra Options		
RVcom Number	0 ▾	
Port Data Buffering		
Media	NONE ▾	
When Data Full	Stop ▾	
Save		

http://192.168.1.54/cgi-bin/index.cgi EKI-1524-BE Web Server

ADVANTECH iCom

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 - Eth 2
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 - Port 1
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 - Port 3
 - Port 4
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 - Syslogd Message
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Port 2 configuration

Basic **Operation** Advanced

Mode	USDG Data Mode
Protocol	TCP
Data Idle Timeout(s)	60
Data Listen Port	5302
Command Listen Port	5400
Response Timeout(ms)	0
Frame Break(ms)	0
TCP Mode Extra Options	
Auto Connect To Peer IP	<input type="checkbox"/>
Port Data Buffering	
Media	NONE
When Data Full	Stop
Pack conditions (Packet sent immediately when reach 1024 Bytes)	
<input type="checkbox"/> By size	Bytes(1 ~ 1024 Bytes)
<input type="checkbox"/> By interval	ms(1 ~ 60000 ms)
<input type="checkbox"/> By end-character	Char Format ASCII Char Value
<input type="checkbox"/> By character-timeout	
Peer for Receiving Data	
Peer Number	0 "0" equal USDG Data Server Mode; ">0" equal USDG Data Client Mode

Save

http://192.168.1.54/cgi-bin/index.cgi EKI-1524-BE Web Server

ADVANTECH iCom

Home

- System
- Ethernet Configuration
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 - Eth 2
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 - Port 1
 - Port 2**
 - Port 3
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Port 2 configuration

Basic **Operation** Advanced

Mode	USDG Control Mode
Protocol	TCP
Data Idle Timeout(s)	60
Data Listen Port	5302
Command Listen Port	5400
Hangup Character	+
Guard Time(ms)	1000

Save

Step7: Port Configuration Page – Advanced Setting Page

!!! These advanced settings are just for some special application cases. We strongly recommend do not enable the advanced settings in normal usage.

The screenshot shows the 'Port 2 configuration' page in the ADVANTECH ICom web interface. The 'Advanced' tab is selected. The page contains the following settings:

Basic	Operation	Advanced
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Enable Delay Time
		0 (ms)
<input type="checkbox"/>	<input type="checkbox"/>	Ignore Purge
<input type="checkbox"/>	<input type="checkbox"/>	Disable Character Timeout Detection
<input type="checkbox"/>	<input type="checkbox"/>	Disable Multiple Connection
<input type="checkbox"/>	<input type="checkbox"/>	Enable BufferData Size
		0
<input type="checkbox"/>	<input type="checkbox"/>	PortTimeout
		0 (ms)
<input type="checkbox"/>	<input type="checkbox"/>	RTL
		32
<input type="checkbox"/>	<input type="checkbox"/>	TTL
		0
<input type="checkbox"/>	<input type="checkbox"/>	FCL
		4
<input type="checkbox"/>	<input type="checkbox"/>	FCH
		96
<input type="checkbox"/>	<input type="checkbox"/>	Write to FIFO Size
		128
USDG Advanced Options(Flow Control will overwrite these options)		
RTS Control		On
DTR Control		On
<input type="button" value="Save"/>		

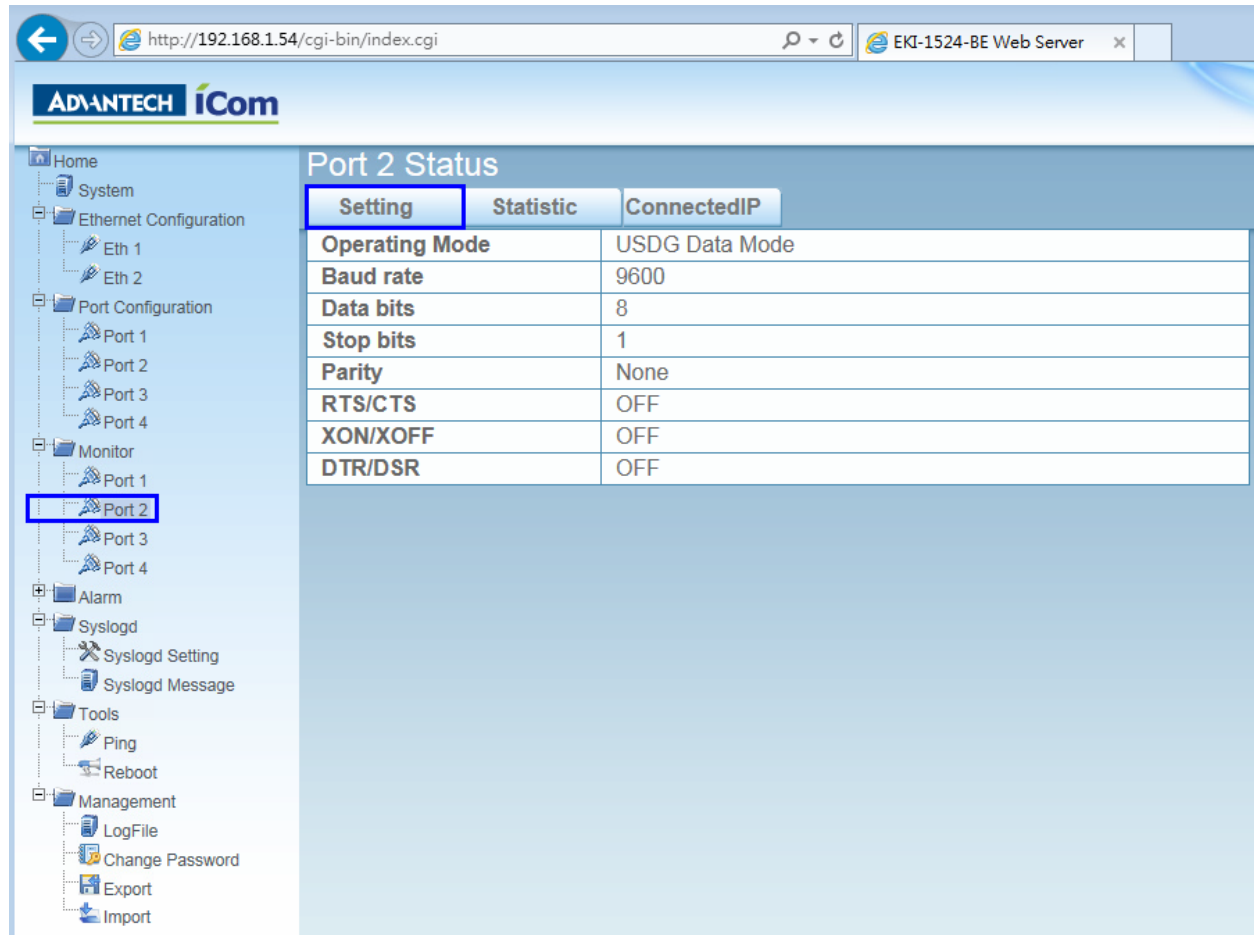
Step8: Monitor Page

In the monitor page, you can monitor Port status. There are three statuses. There are Setting, Statistic, ConnectedIP these three sub-page.

Setting page for monitor Port status Setting.

Statistic page for tx/rx transmitted/received data counter

ConnectedIP page for connected device IP address



Setting	Statistic	ConnectedIP
Operating Mode	USDG Data Mode	
Baud rate	9600	
Data bits	8	
Stop bits	1	
Parity	None	
RTS/CTS	OFF	
XON/XOFF	OFF	
DTR/DSR	OFF	

Step9: Alarm setting

You can set the e-mail server and SNMP Trap server in the Setting page, and set up the event type in the Event page.

Alarm Setting

Mail Server	
Mail Server	
From Email address	admin@advantech.com
Email address 1	
Email address 2	
Email address 3	
Email address 4	

SNMP Trap Server	
Trap Server	
Trap Server Port	162
Trap Version	<input checked="" type="radio"/> v1 <input type="radio"/> v2c
Trap Community	public

SNMP Agent Setting	
Read Community	
Write Community	
Contact	
Location	

Save

Browser: <http://192.168.1.54/cgi-bin/index.cgi> | EKI-1524-BE Web Server

ADVANTECH ICom

- Home
- System
- Ethernet Configuration
 - Eth 1
 - Eth 2
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 - Port 1
 - Port 2
 - Port 3
 - Port 4
- Monitor
 - Port 1
 - Port 2
 - Port 3
 - Port 4
- Alarm
 - Setting
 - Event**
- Syslogd
 - Syslogd Setting
 - Syslogd Message
- Tools
 - Ping
 - Reboot
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 - LogFile
 - Change Password
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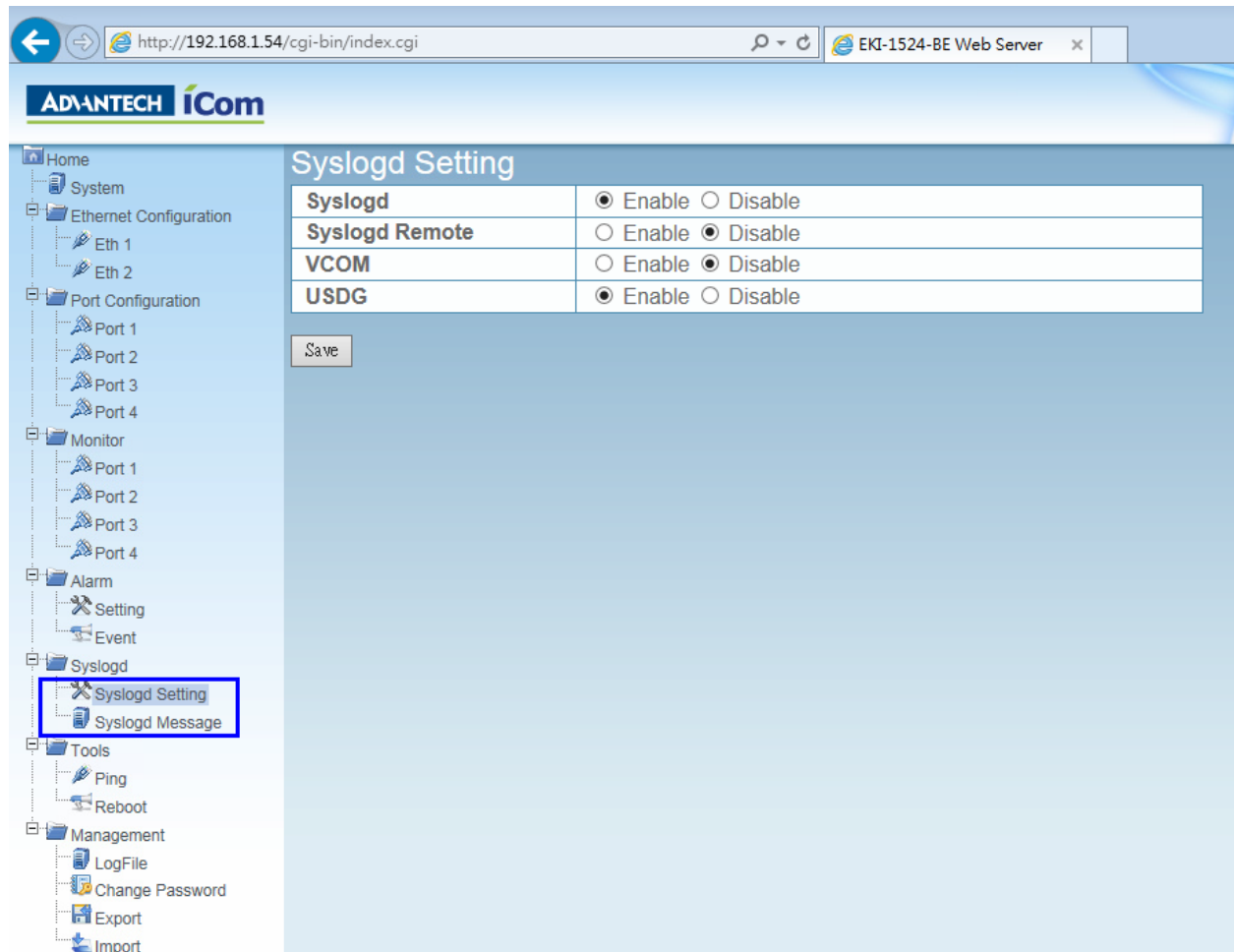
Event Type

System Event			
Cold Start	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
Warm Start	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
Authentication failure	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
IP address changed	<input type="checkbox"/> Mail		
Password changed	<input type="checkbox"/> Mail		
Ethernet1 link down	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
Ethernet2 link down	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
DCD changed			
Port 1	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
Port 2	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
Port 3	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
Port 4	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
DSR changed			
Port 1	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
Port 2	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
Port 3	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log
Port 4	<input type="checkbox"/> Mail	<input type="checkbox"/> Trap	<input type="checkbox"/> Log

Step10: System log debug message

Enable system log debug message that can observe device server behavior if there is some error happened. This function can help customer easily to debug.

<p.s. this function support EKI-152x-BE/EKI-122x-BE>



The screenshot shows the ADVANTECH iCom web interface. The browser address bar displays `http://192.168.1.54/cgi-bin/index.cgi` and the page title is "EKI-1524-BE Web Server". The left sidebar contains a navigation tree with the following items: Home, System, Ethernet Configuration (Eth 1, Eth 2), Port Configuration (Port 1, Port 2, Port 3, Port 4), Monitor (Port 1, Port 2, Port 3, Port 4), Alarm (Setting, Event), Syslogd (Syslogd Setting, Syslogd Message), Tools (Ping, Reboot), and Management (LogFile, Change Password, Export, Import). The "Syslogd Setting" item is highlighted with a blue box. The main content area is titled "Syslogd Setting" and contains a table with the following settings:

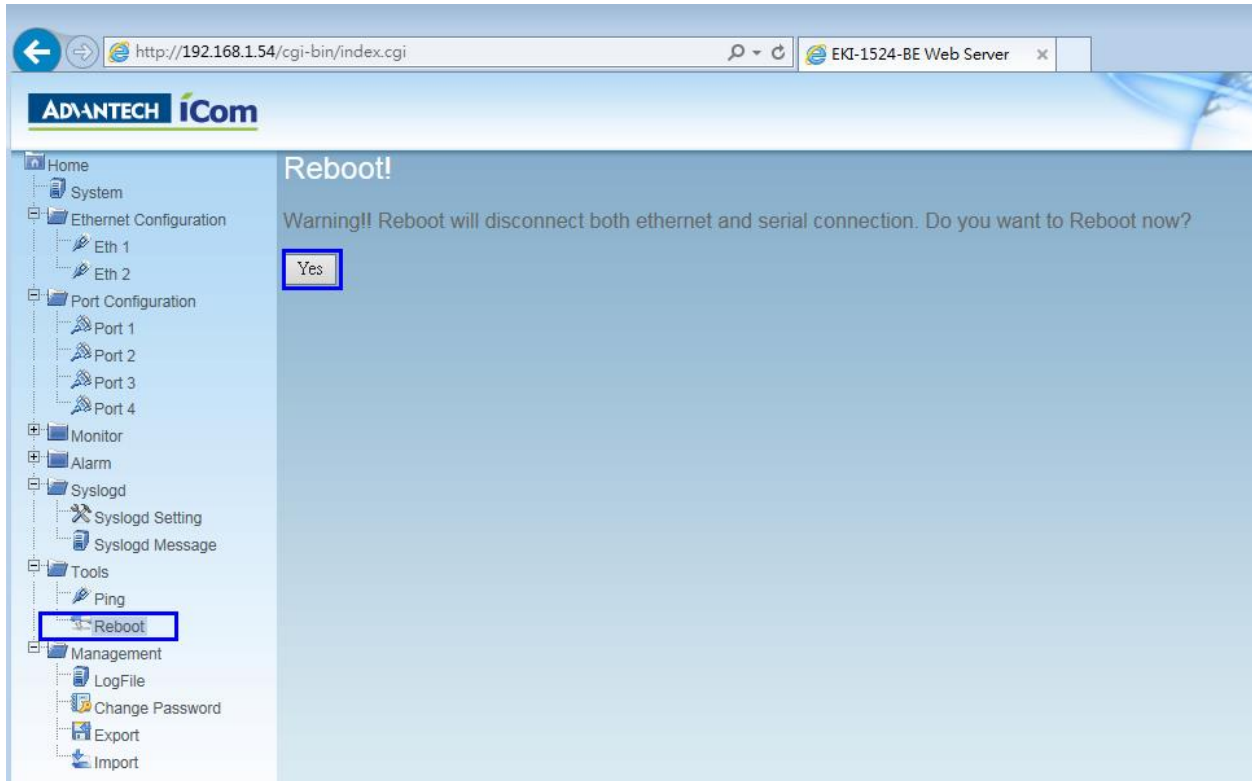
Syslogd	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Syslogd Remote	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
VCOM	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
USDG	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

Below the table is a "Save" button.

Step11: Reboot

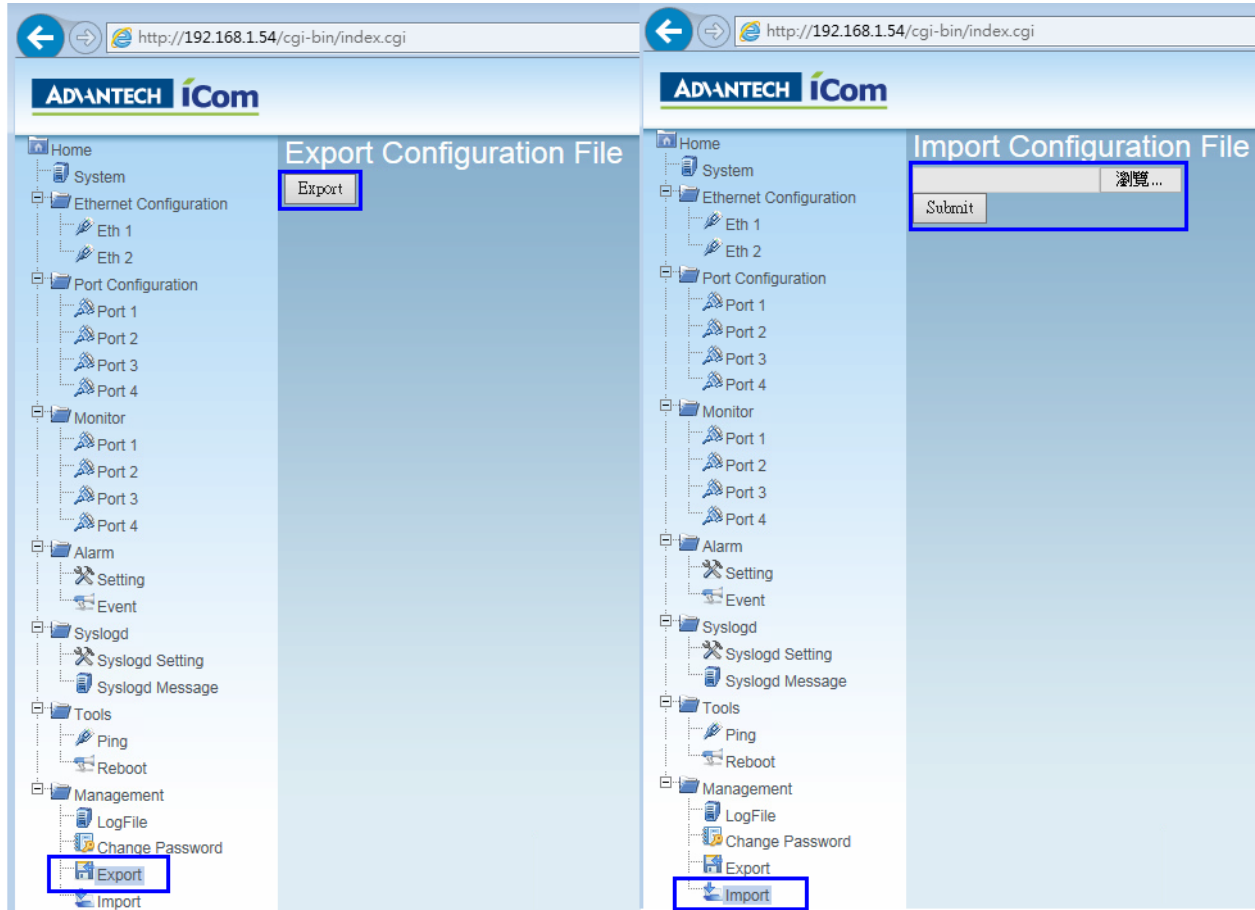
The configuration will take effect after clicking “Save” button.

All configurations would save to flash memory after this reboot step. Press the “Reboot” button and the system will go to reboot. After rebooting, the modified configuration would success to rewrite and device will take a few seconds to reconnect with the new values.



Step12: Import/Export configuration file

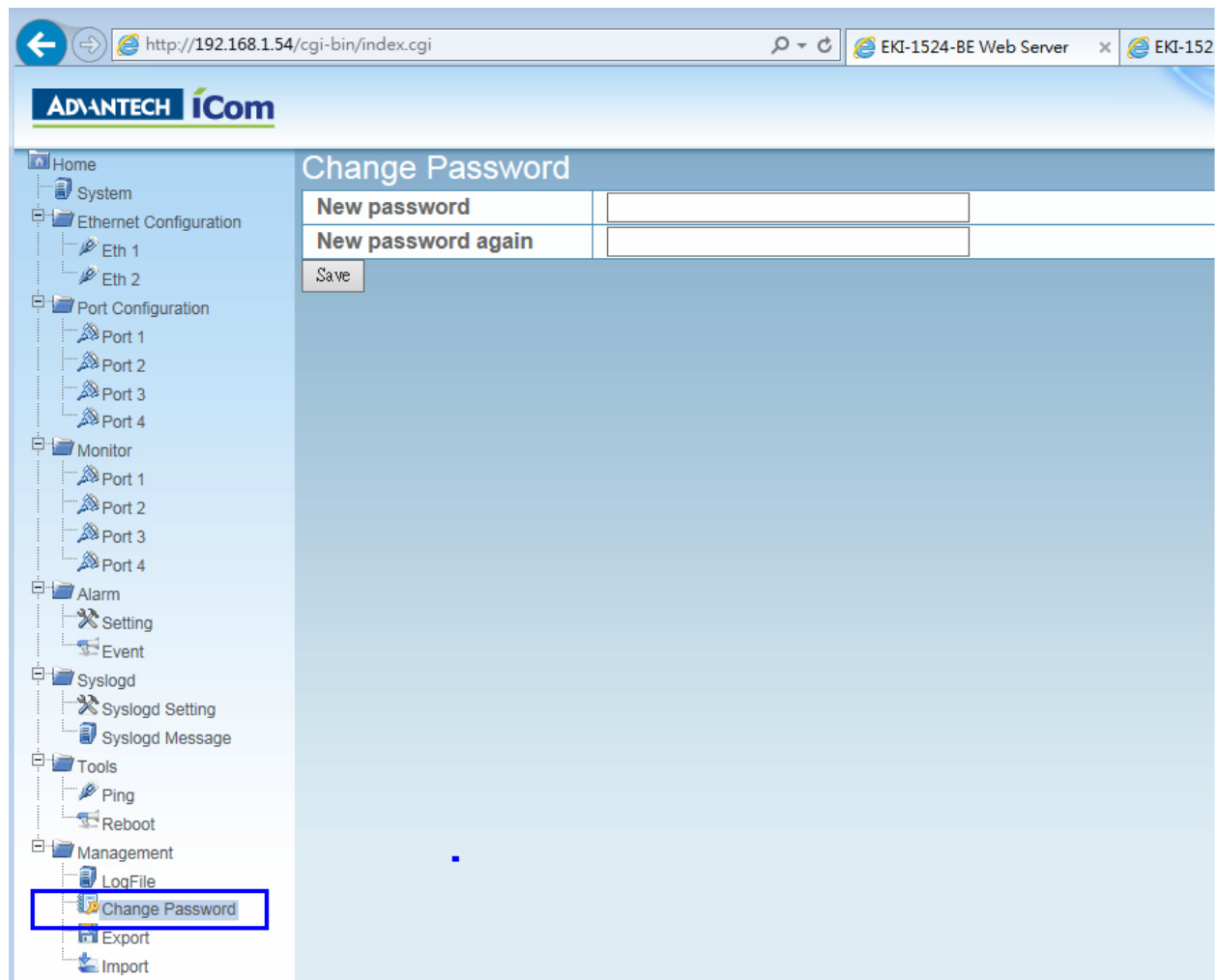
You can Import/Export the serial device server all setting as the “.conf” file format.



Step13: Change Password

You can change the device server password over here:

If you want to **disable** password protection, just leave the new password column “blank” (not to key-in any value) and press the “Save” button. It would change after reboot the serial device server to make effective.



■ **Reference:**

[EKI-1521_1522_1524_Manual_Ed3.pdf](#)

■ **Contact Window and File Link:**

If you have any questions, please contact with local technical support