EKI-6332 & EKI-136x-BE USDG Setup Example

Revision Date	Revision	Description	Author
May/2018	V1.0	Initial release	ICG AE Jacky.Lin

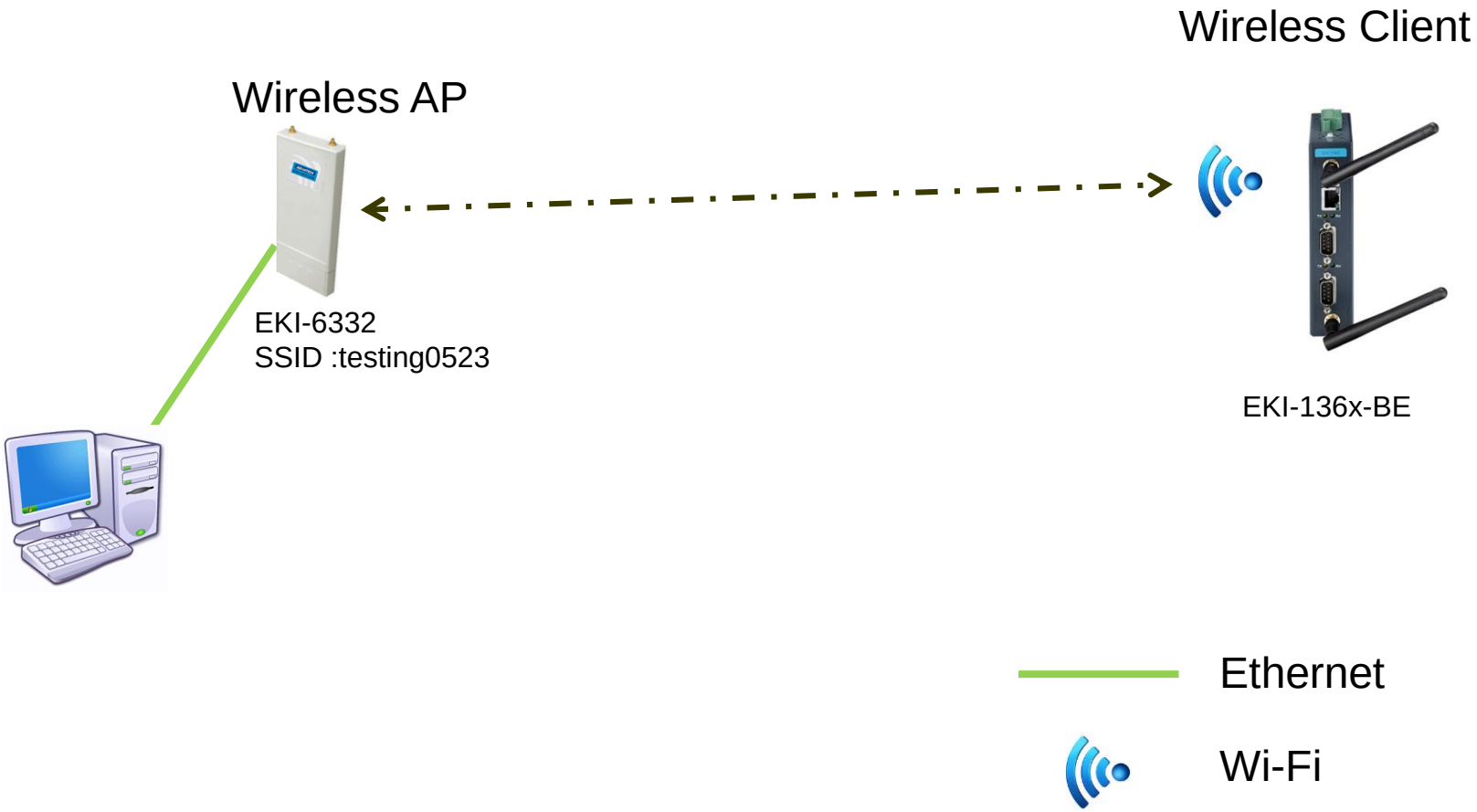
Abstract

- **Part1 :This SOP explains how to configure the EKI-6332 & EKI-136x-BE to build up the wireless connection**
- **Part 2: This SOP also shows how to set the USDG Client/Server mode on EKI-136x-BE for collecting data from the SCADA PC .**
- **Related products:**

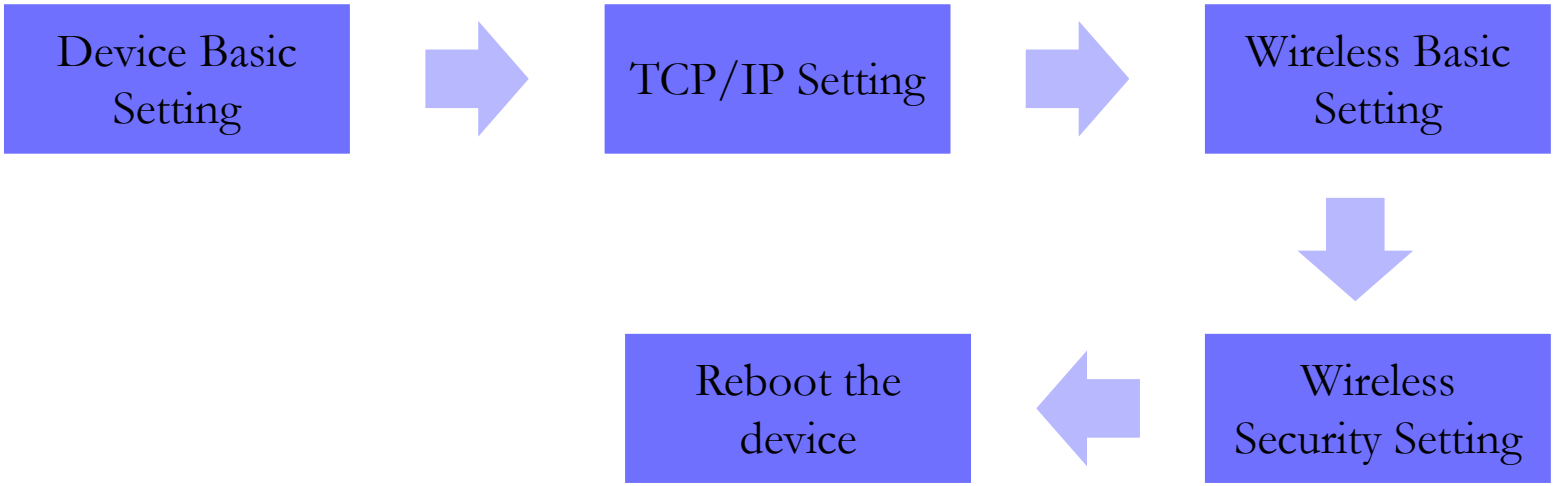
  EKI-6331, EKI-6332, EKI-136x-BE
- **Requirement:** EKI-6332, EKI-136x-BE, TestView tool (Third party tool)

Wi-Fi connection Setup Between EKI-6332 & EKI-136x-BE

EKI-6332 --- EKI-136x-BE wireless connection setting Topology

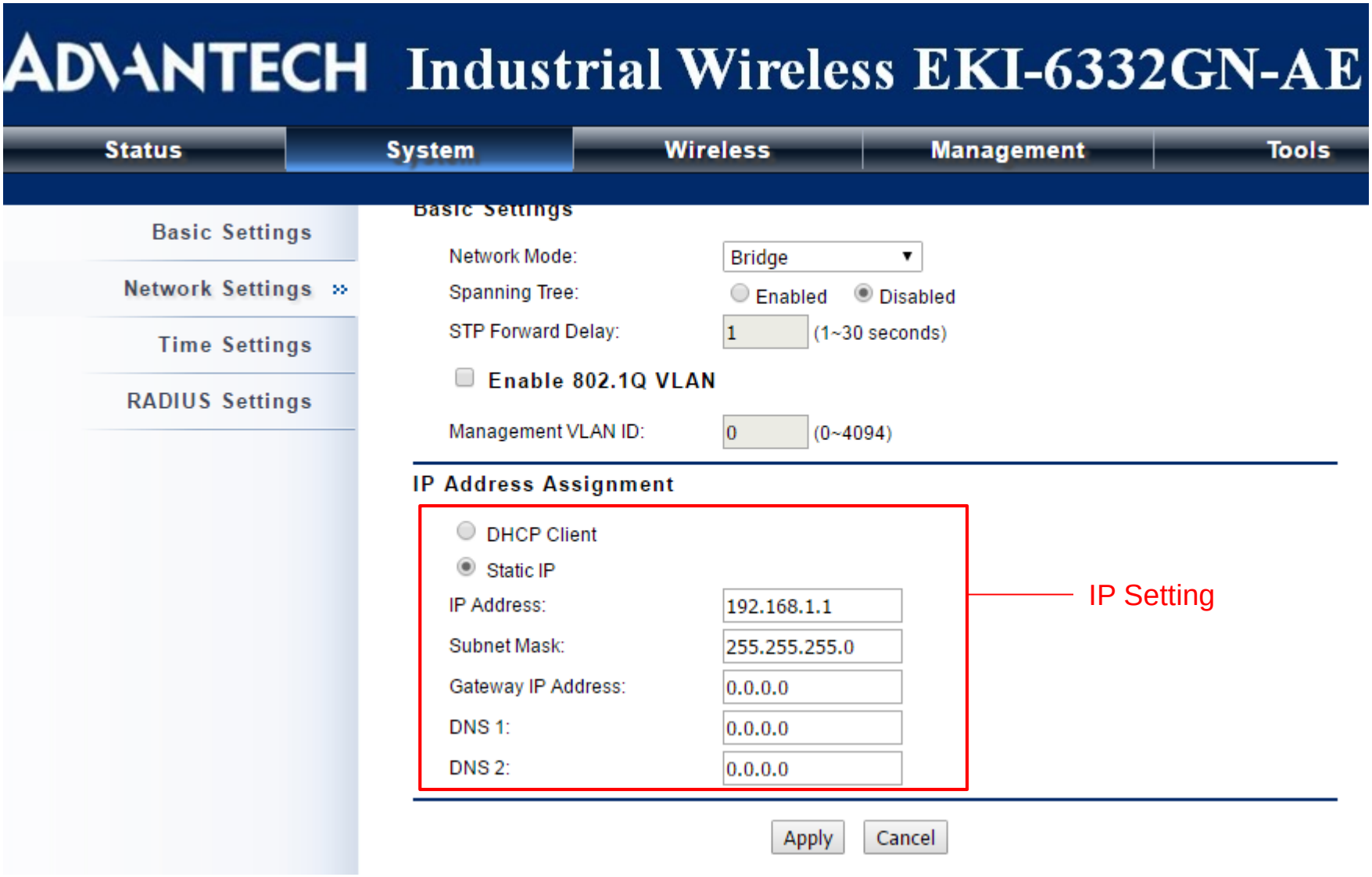


EKI-6332 Configuration Flow chart

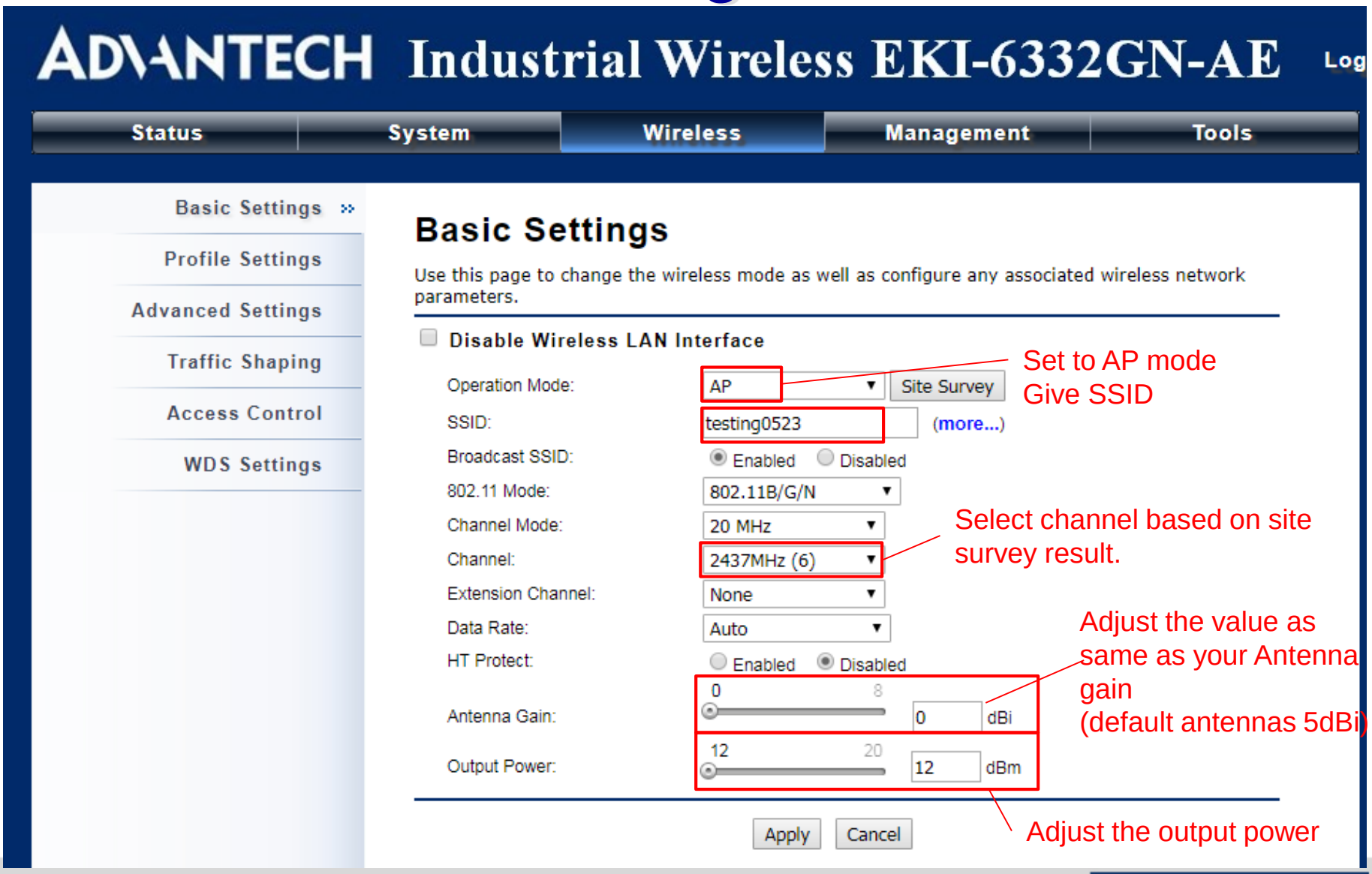


Device Basic Setting

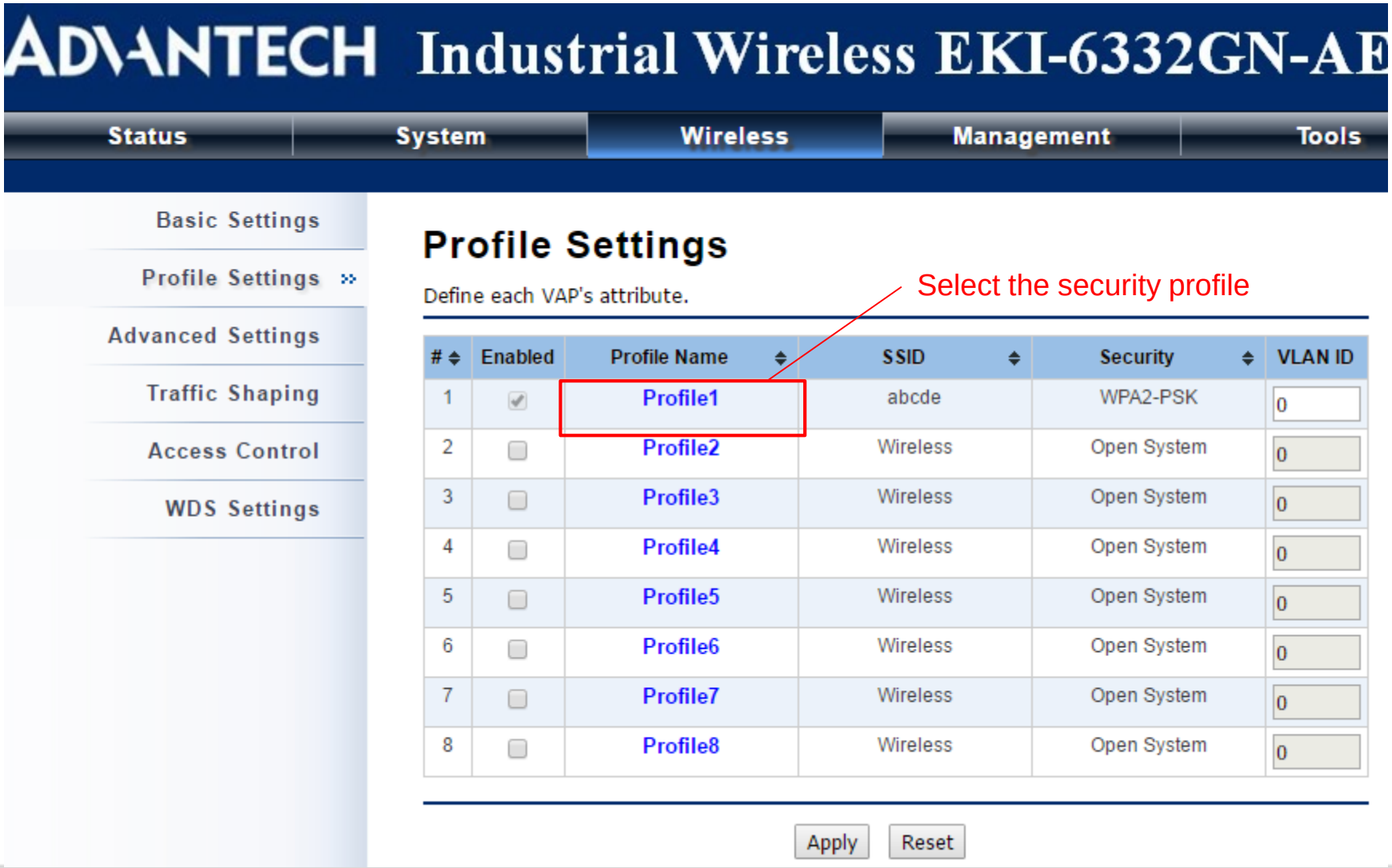
TCP/IP Setting



Wireless Basic Setting

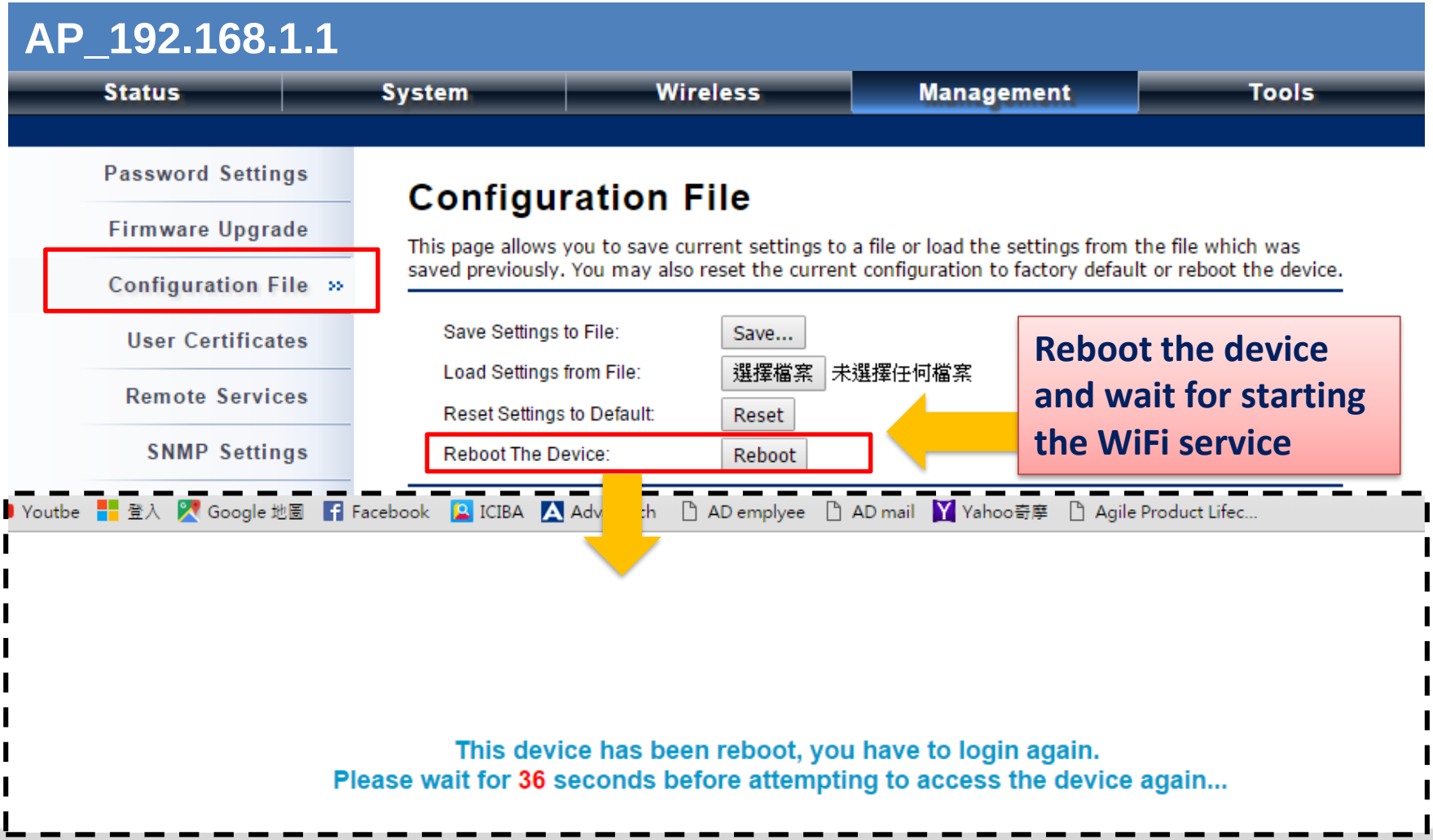


Wireless Basic Setting

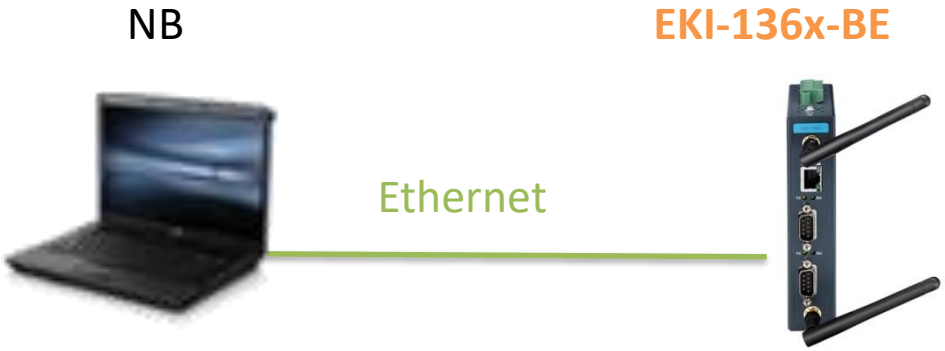


WiFi Security Setting

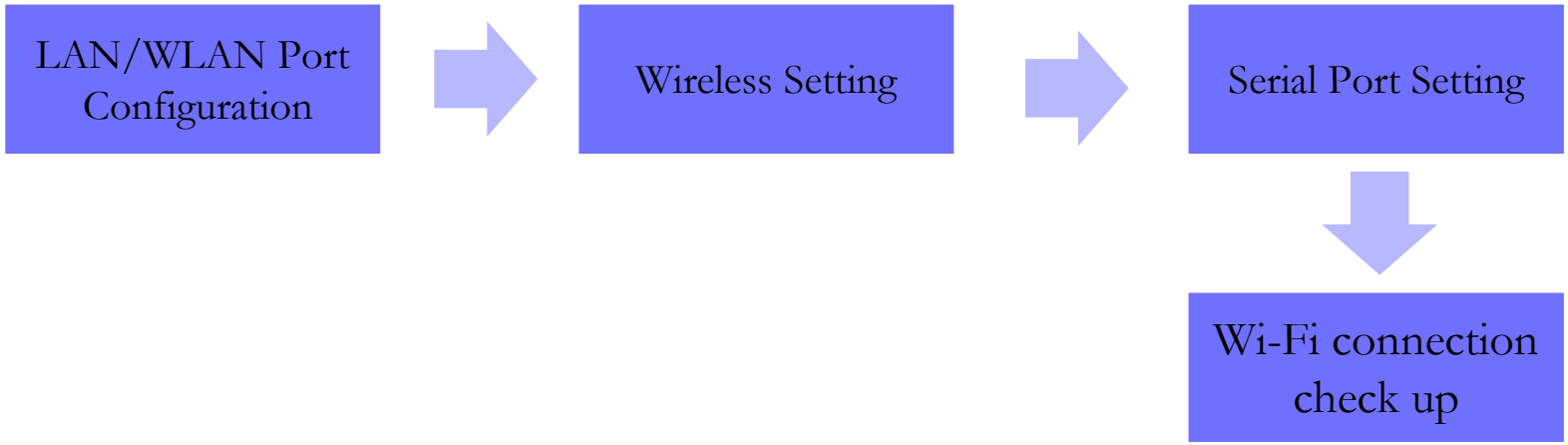
Reboot the Device



EKI-136x-BE Setting flow chart

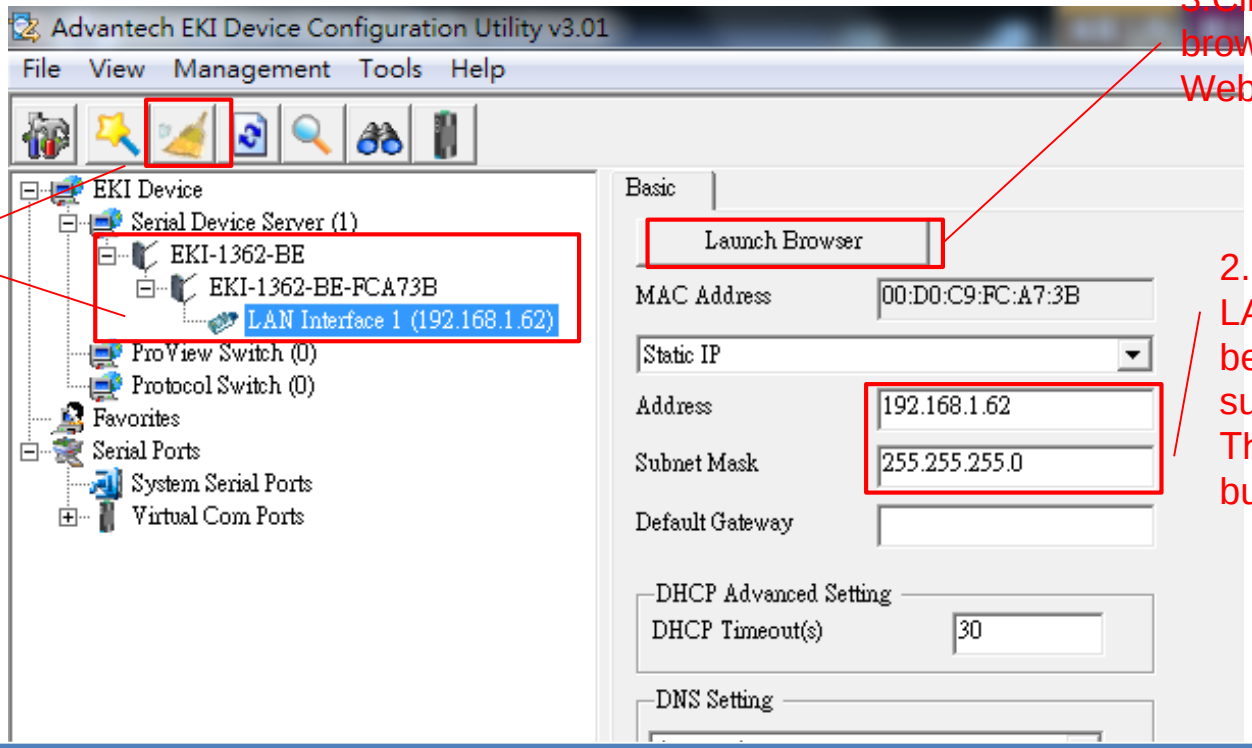


Step 1 : Connect the EKI-136x-BE via Ethernet cable
Step 2 : follow the flow chart to set up EKI-136x-BE step by step.



LAN/WLAN configuration on Utility

1.EKI Utility will able to scan the EKI-136x-BE

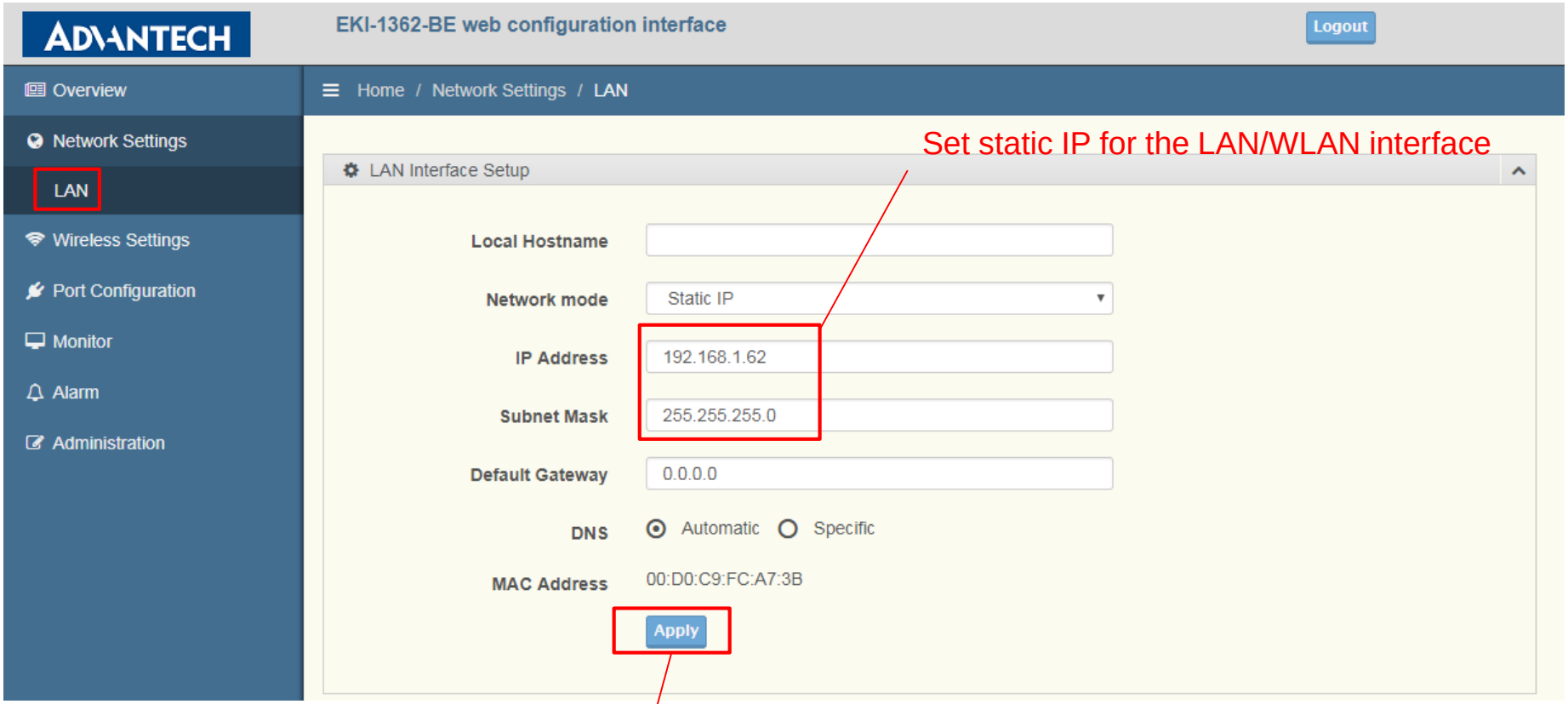


3.Click on Launch browser to go the WebGUI.

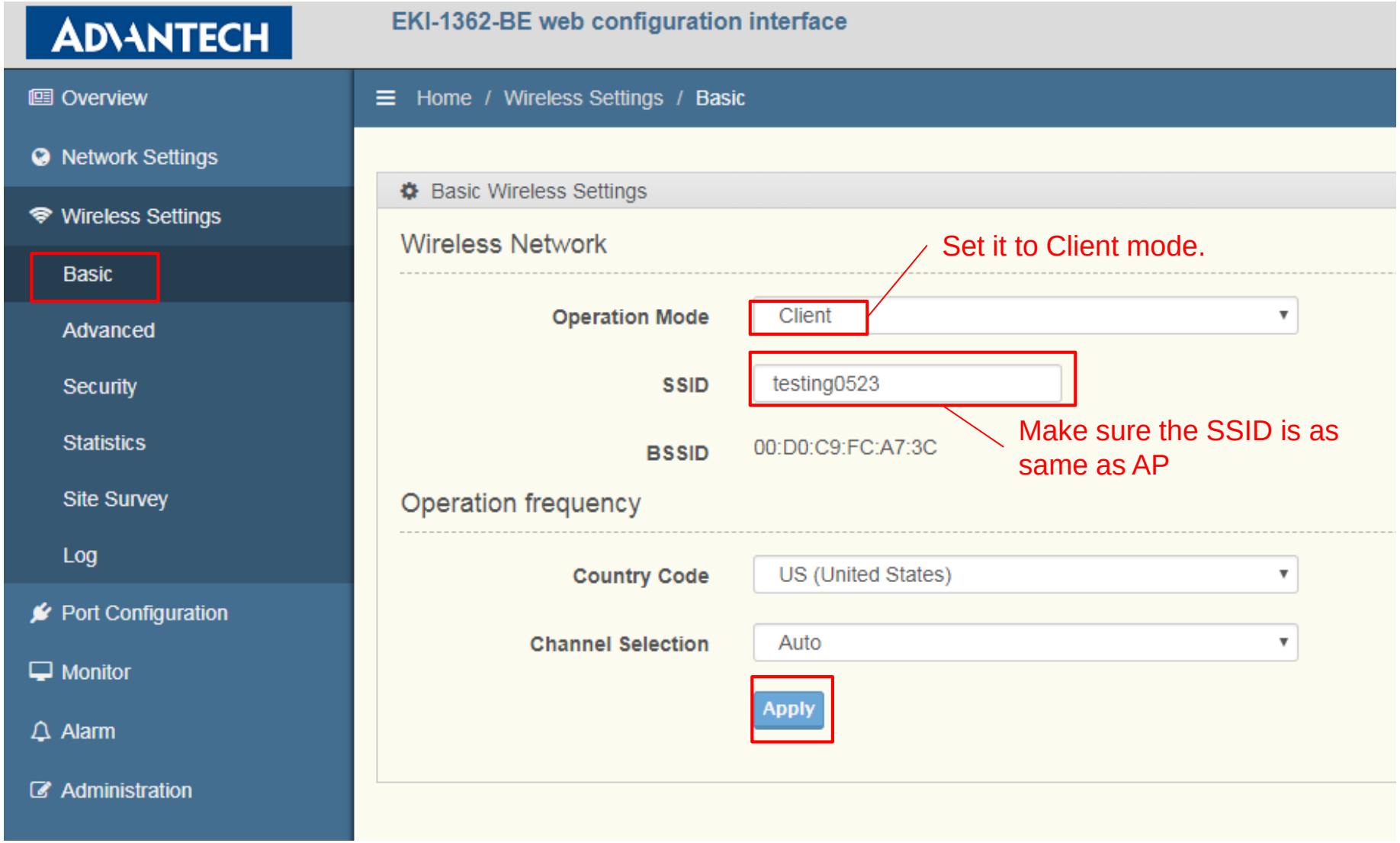
2.Config LAN/WLAN IP to be the same subnet as the PC. Then, press “apply” button.

- Note: Please make sure the Utility version is 3.01 upper. You can refer the following link for latest FW version information.
  http://support.advantech.com/support/DownloadSRDetail_New.aspx?SR_ID=1-1FLDMSV&Doc_Source=Download
- Note: The LAN IP interface & WLAN IP interface are bridge together in the EKI-136x-BE. Therefore, there is only one IP (LAN Interface)you could set on the EKI utility. You won’t see the WLAN IP setting interface.

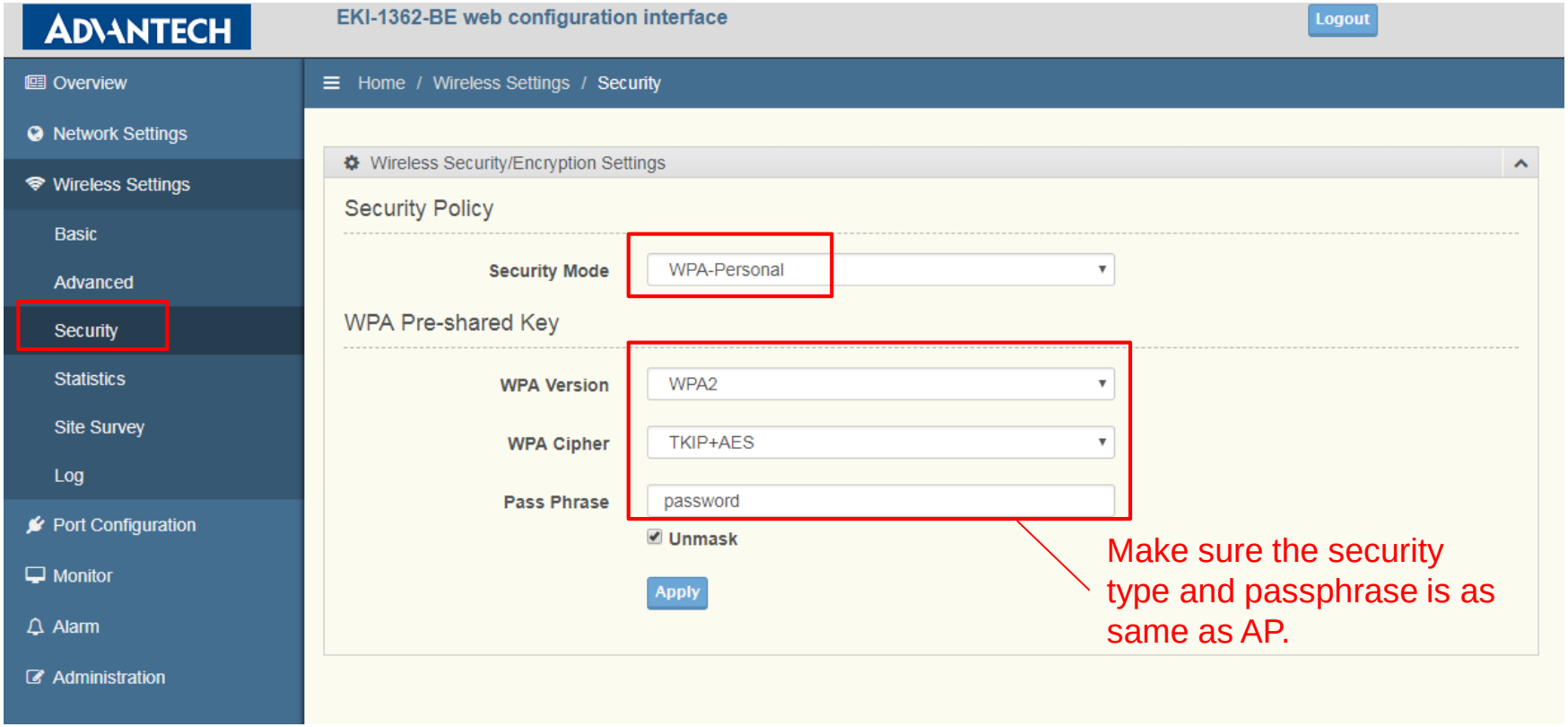
LAN/WLAN Configuration on WebGUI



Wireless basic setting



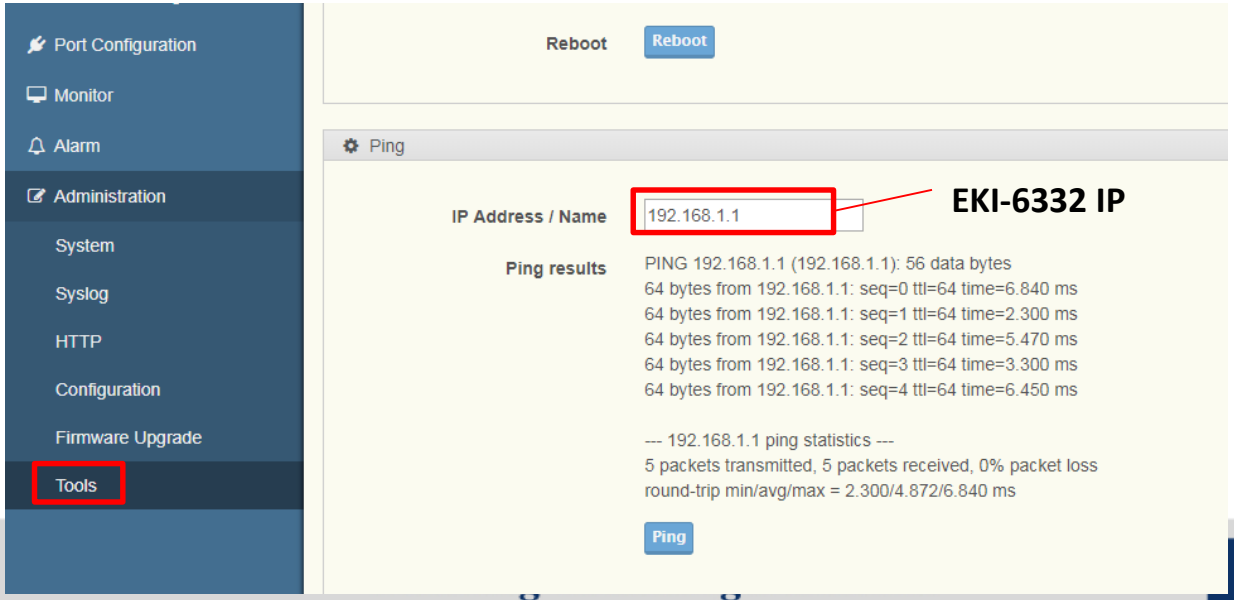
WiFi Security Setting



Reboot and Run the ping test

Step 1 :Reboot device after all setting done

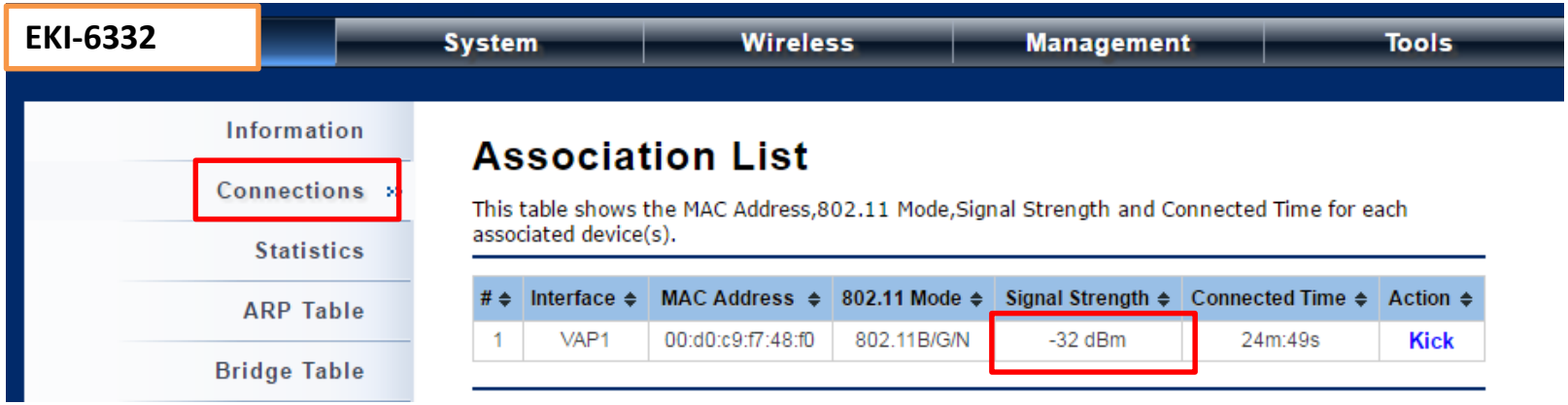
Step 2 : ping EKI-6332 to make sure the wireless connection is established



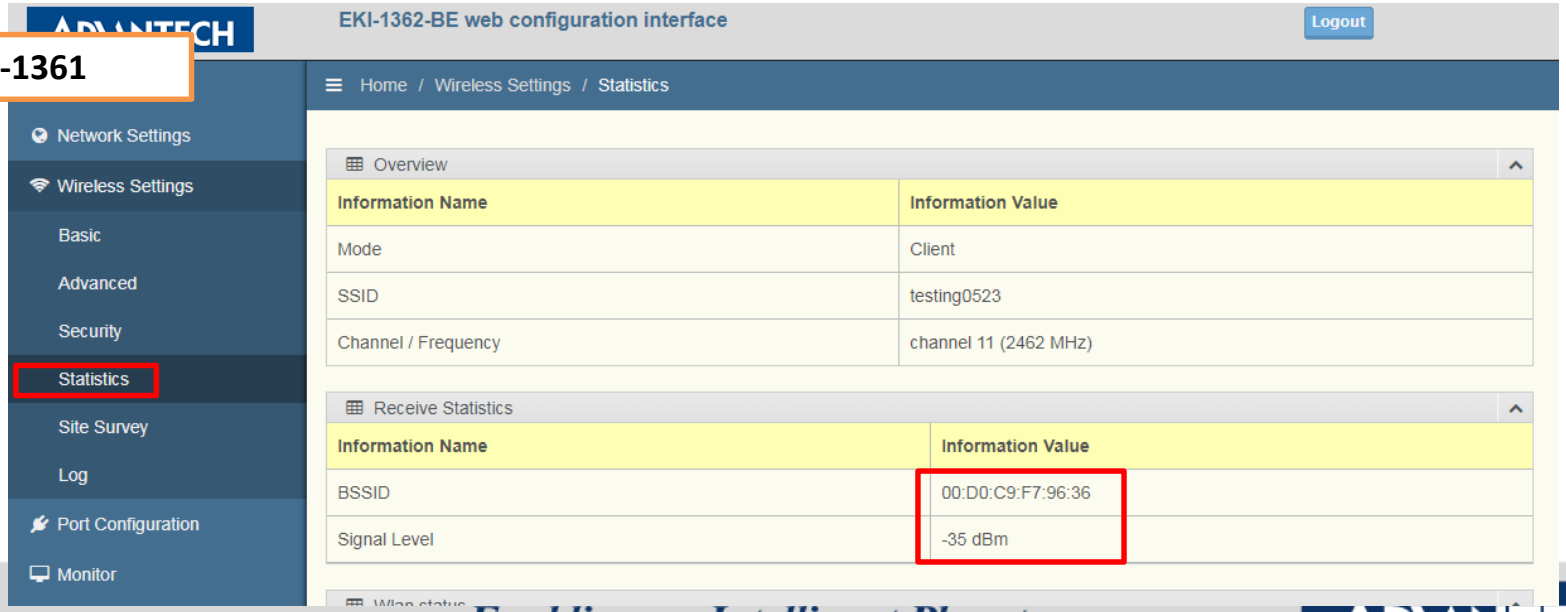
Wi-Fi connection check up

You may also check the Wi-Fi signal for AP/client on Web GUI

EKI-6332

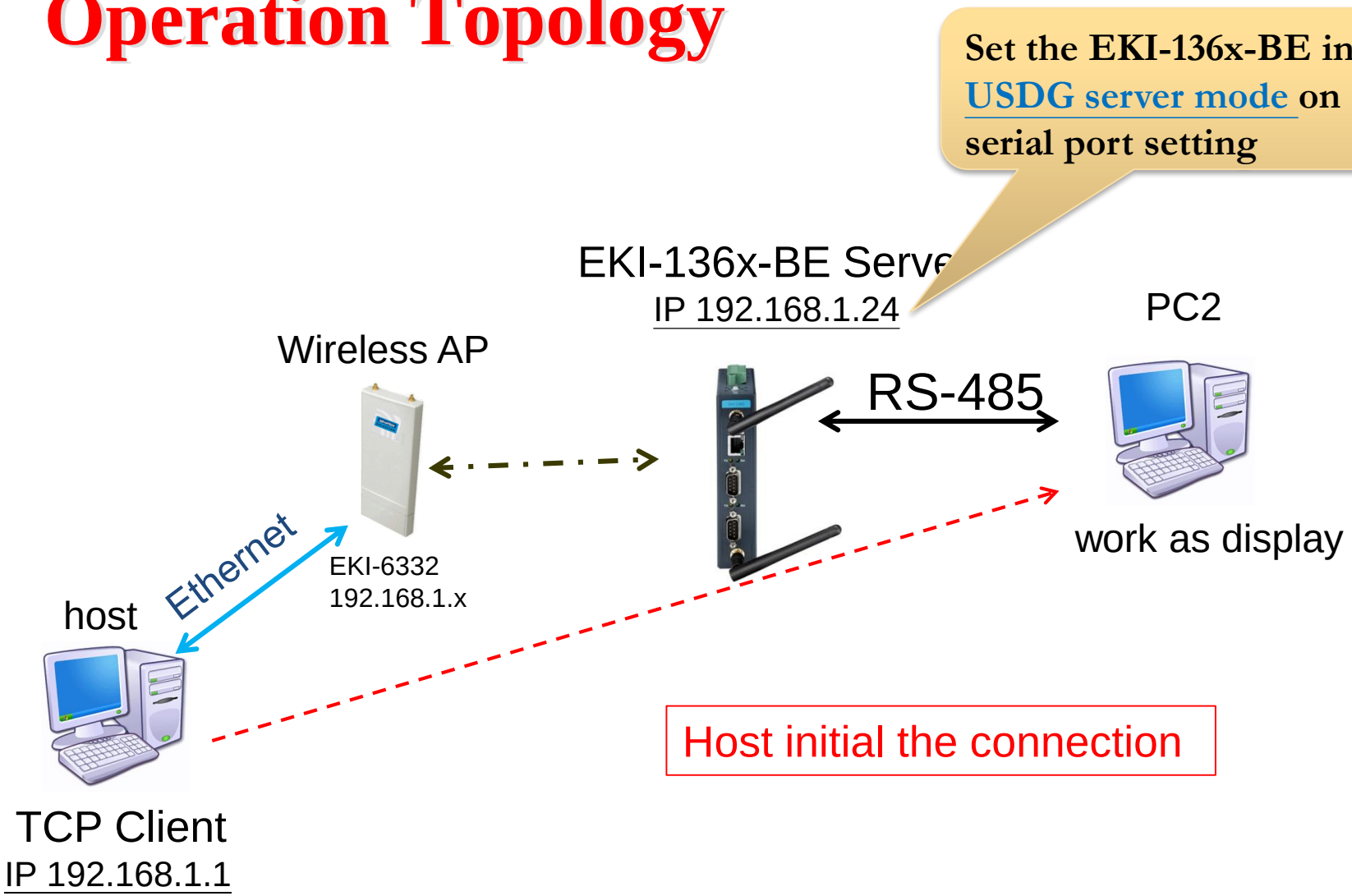


EKI-1361

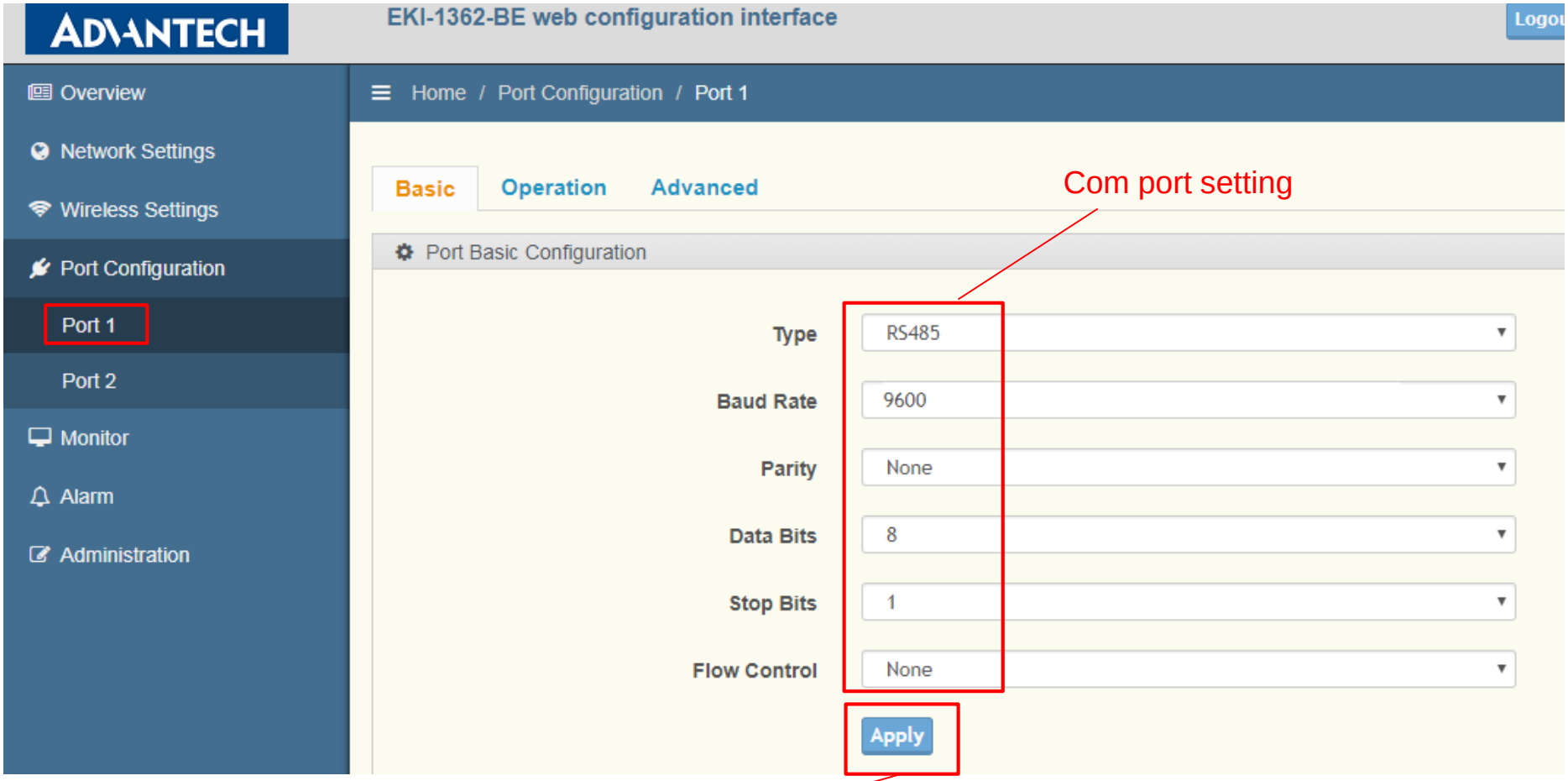


Test USDG Server Mode by TestView

USDG Server Mode
Operation Topology

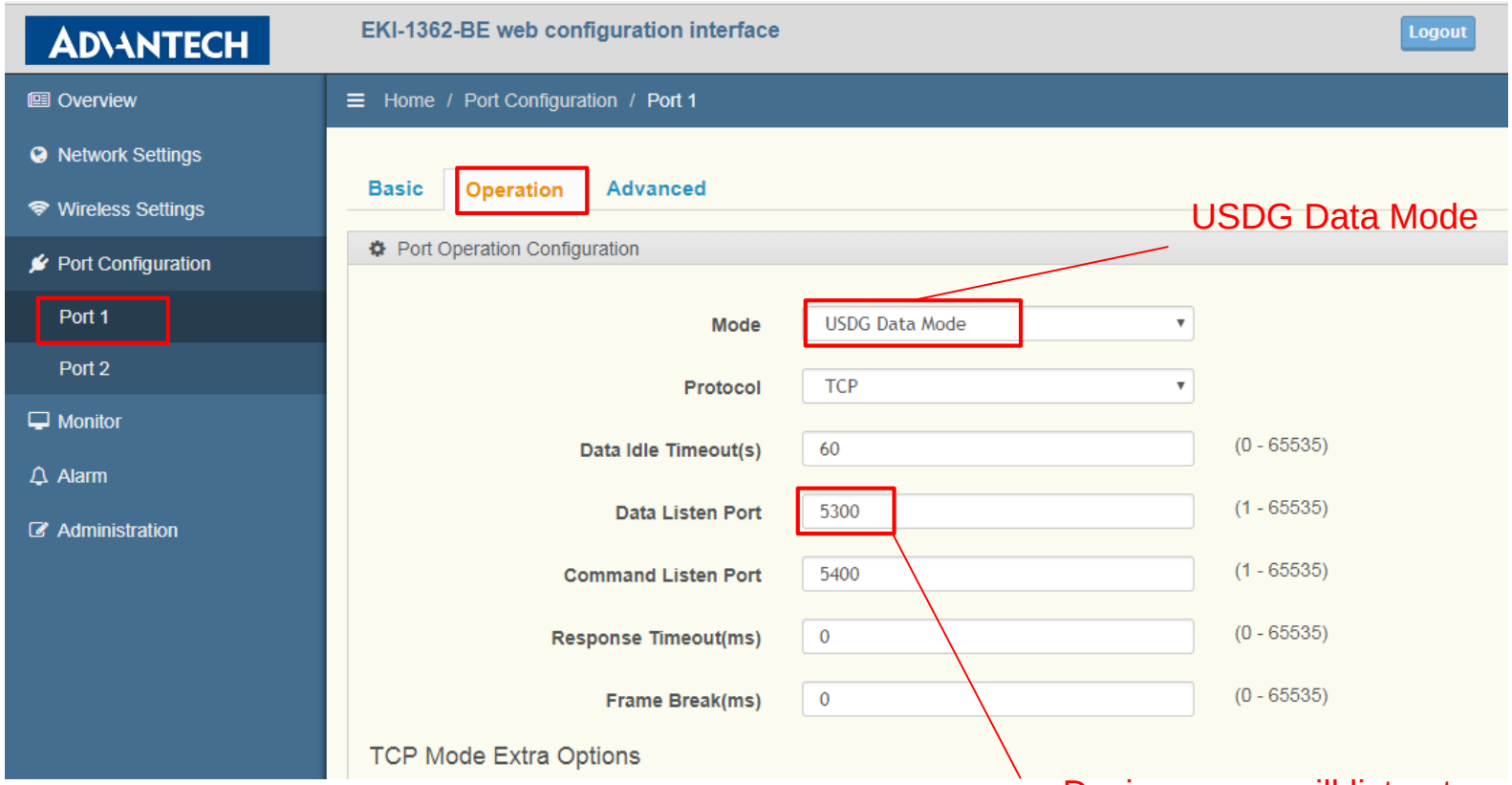


Serial Port Setting (1/2)



Click save on every config change, but config will only be activated after device reboot

Serial Port mode setting (2/2)
USDG server mode



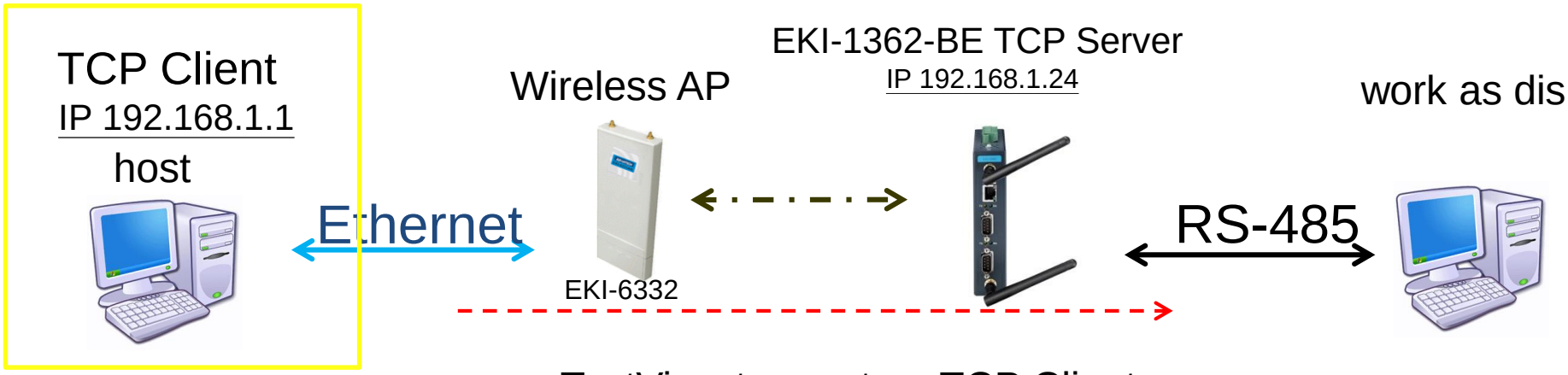
Reboot the EKI-136x-BE device

Step 1 :Reboot device after all setting done

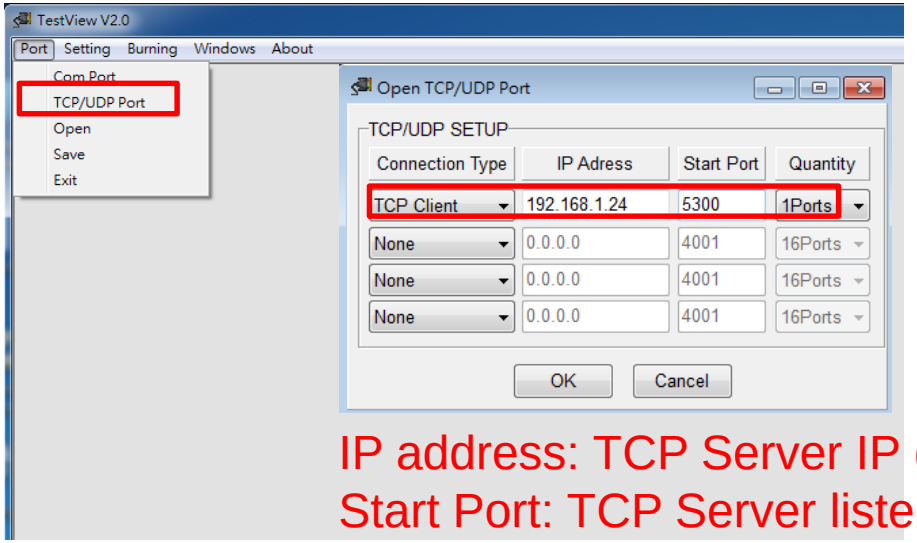
USDG Server Mode

Test by TestView

1st.

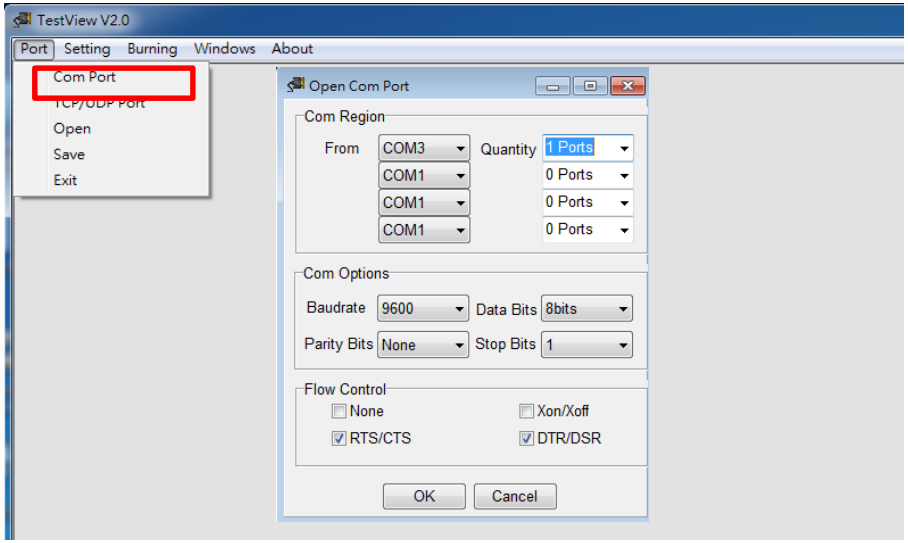


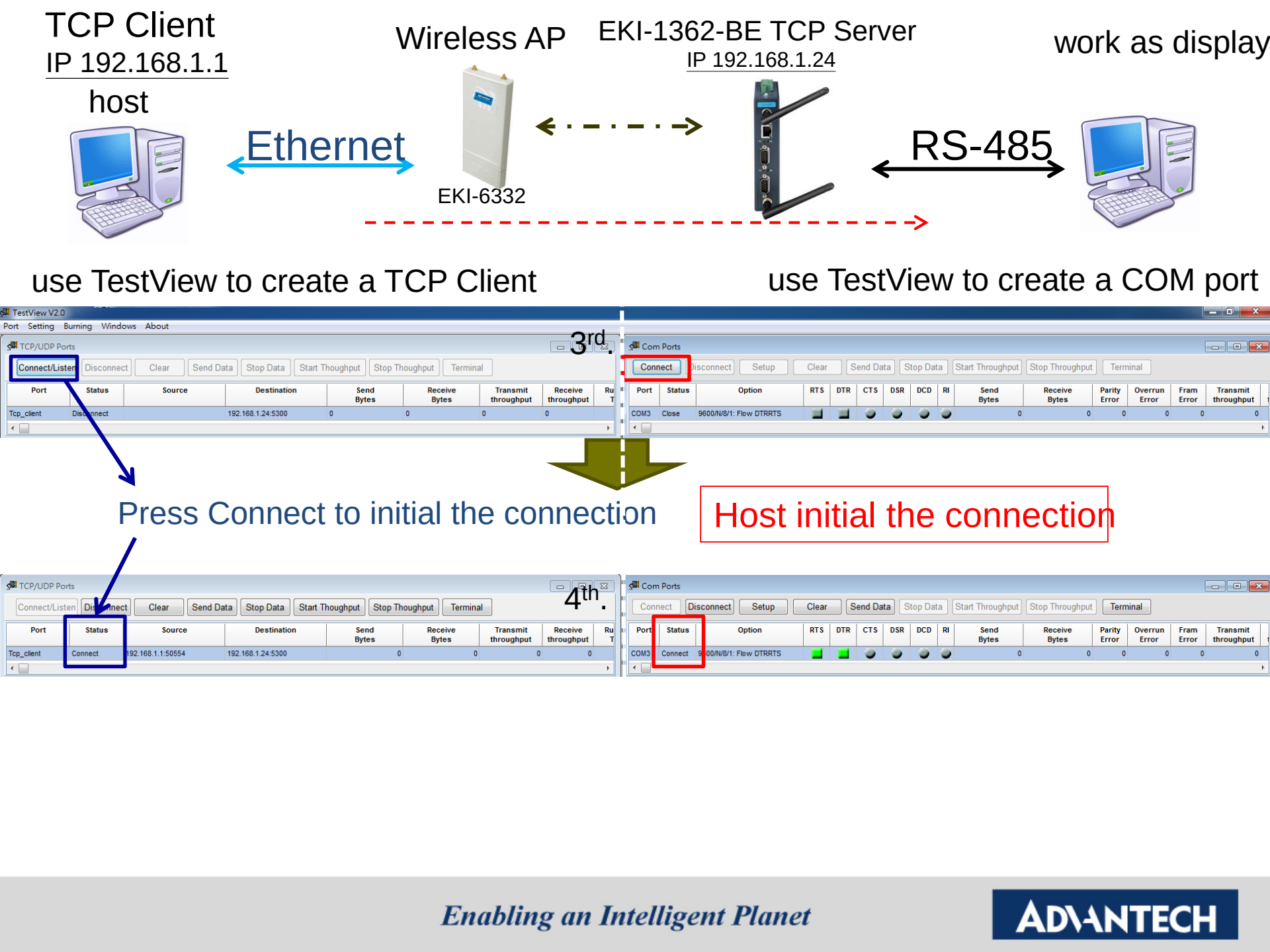
use TestView to create a TCP Client



IP address: TCP Server IP (device server)
Start Port: TCP Server listen Port (device Server)

USDG Server Mode
Test by TestView




TCP Client
IP 192.168.1.1
host
Ethernet
Wireless AP
EKI-6332
EKI-1362-BE TCP Server
IP 192.168.1.24
work as display
RS-485
use TestView to create a TCP Client
use TestView to create a COM port
TestView V2.0
Port Setting Burning Windows About
TCP/UDP Ports
Connect/Listen
Disconnect
Clear
Send Data
Stop Data
Start Thoughput
Stop Thoughput
Terminal
Port Status Source Destination Send Bytes Receive Bytes Transmit throughput Receive throughput
Tcp_client Disconnect 192.168.1.24:5300 0 0 0 0
3rd.
Com Ports
Connect
Disconnect
Setup
Clear
Send Data
Stop Data
Start Throughput
Stop Throughput
Terminal
Port Status Option RTS DTR CTS DSR DCD RI Send Bytes Receive Bytes Parity Error Overrun Error Fram Error Transmit throughput
COM3 Close 9600/N/8/1: Flow DTRRTS 0 0 0 0 0 0
Press Connect to initial the connection
Host initial the connection
TCP/UDP Ports
Tcp_client Connect 192.168.1.1:50554 192.168.1.24:5300 0 0 0 0
4th.
COM3 Connect 9600/N/8/1: Flow DTRRTS 0 0 0 0 0 0

TCP Client
IP 192.168.1.1
host

Ethernet

Wireless AP

EKI-6332

EKI-1362-BE TCP Server
IP 192.168.1.24

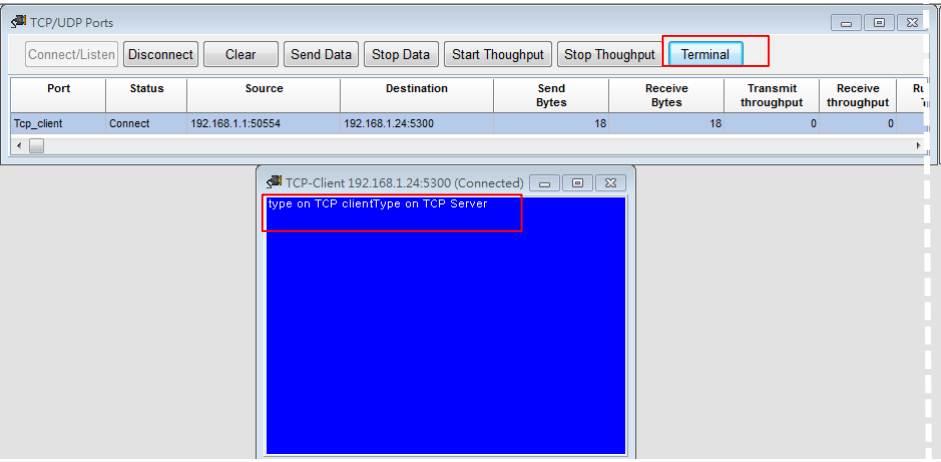
RS-485

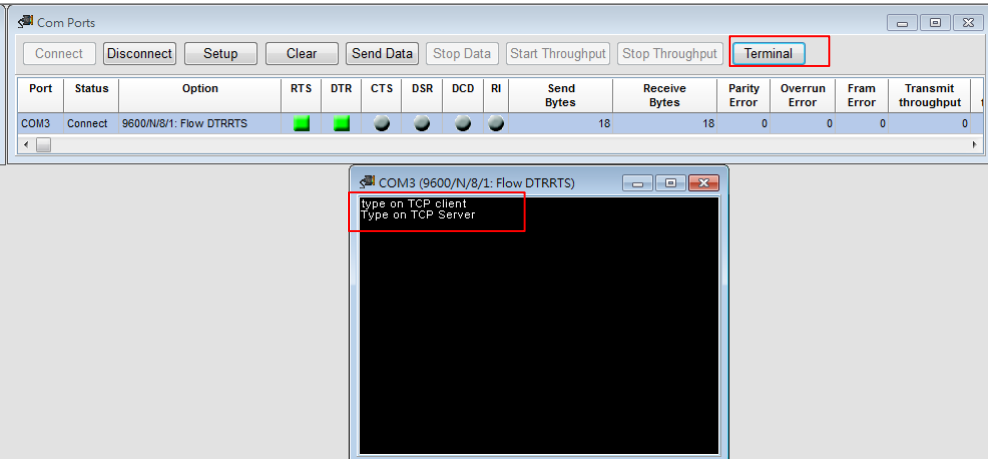
work as display

use TestView to create a TCP Client

use TestView to create a COM por

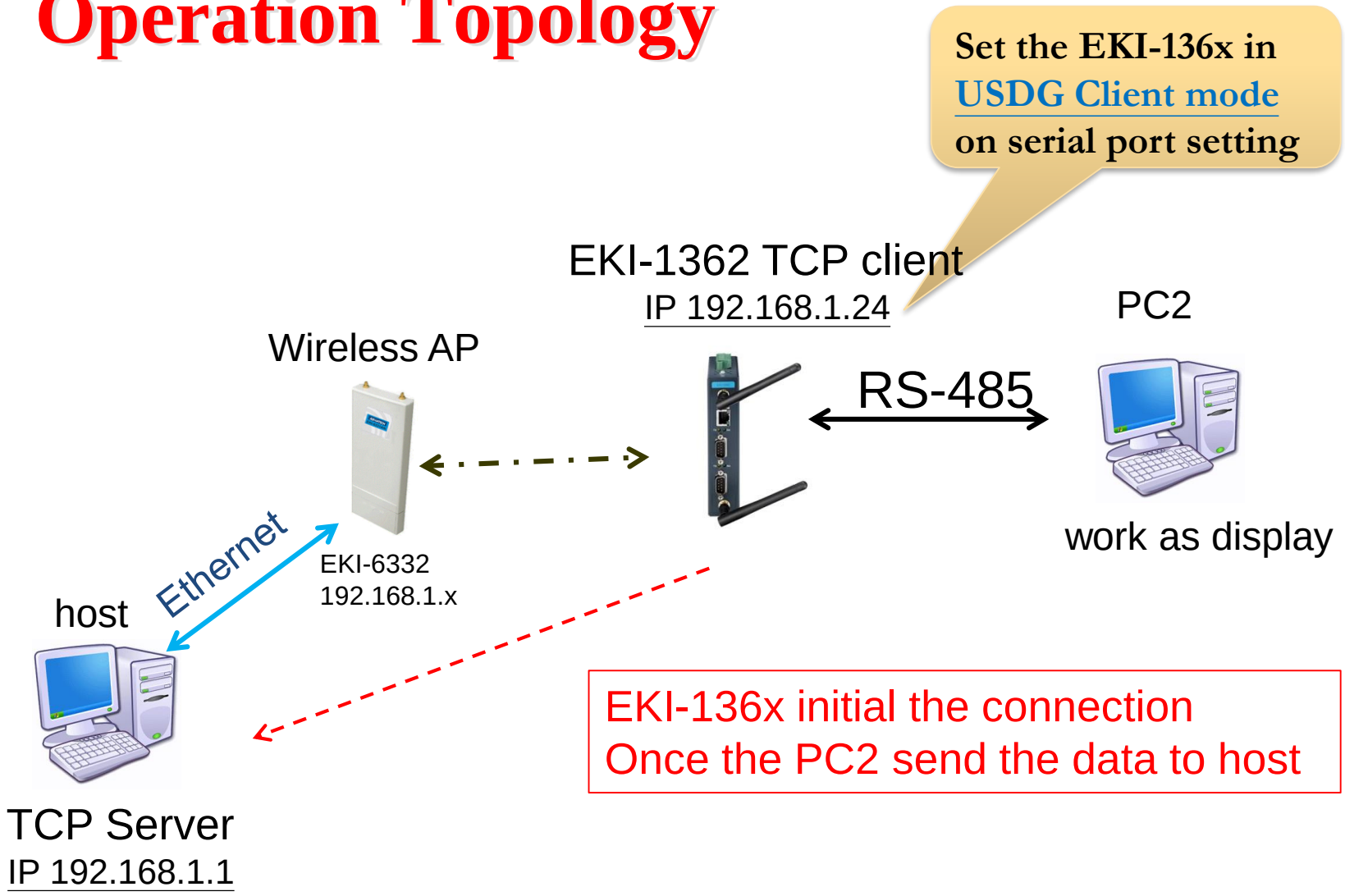
after starting connection, data can be sent by both side



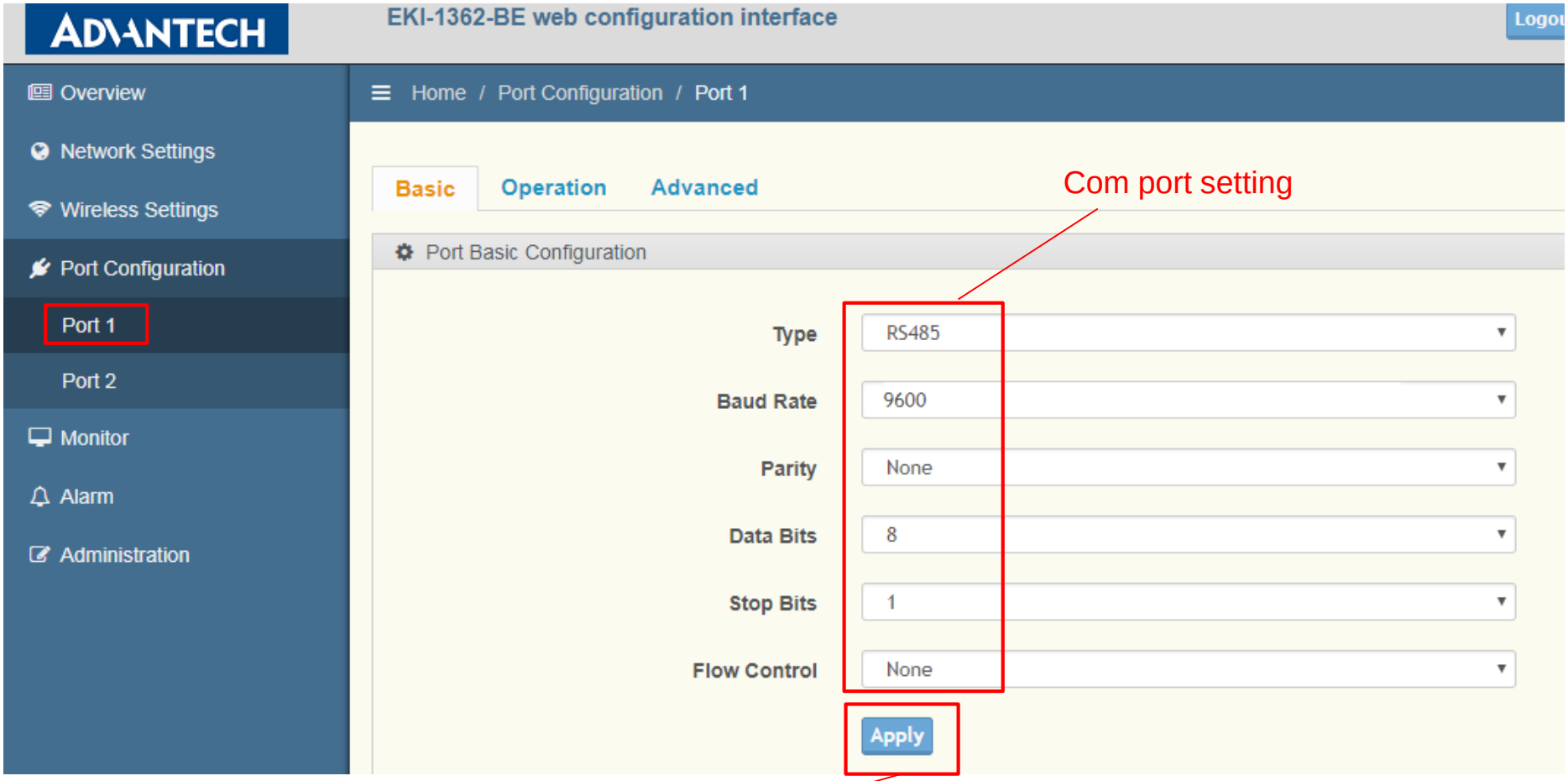


Test USDG Client Mode by TestView

USDG Client Mode
Operation Topology

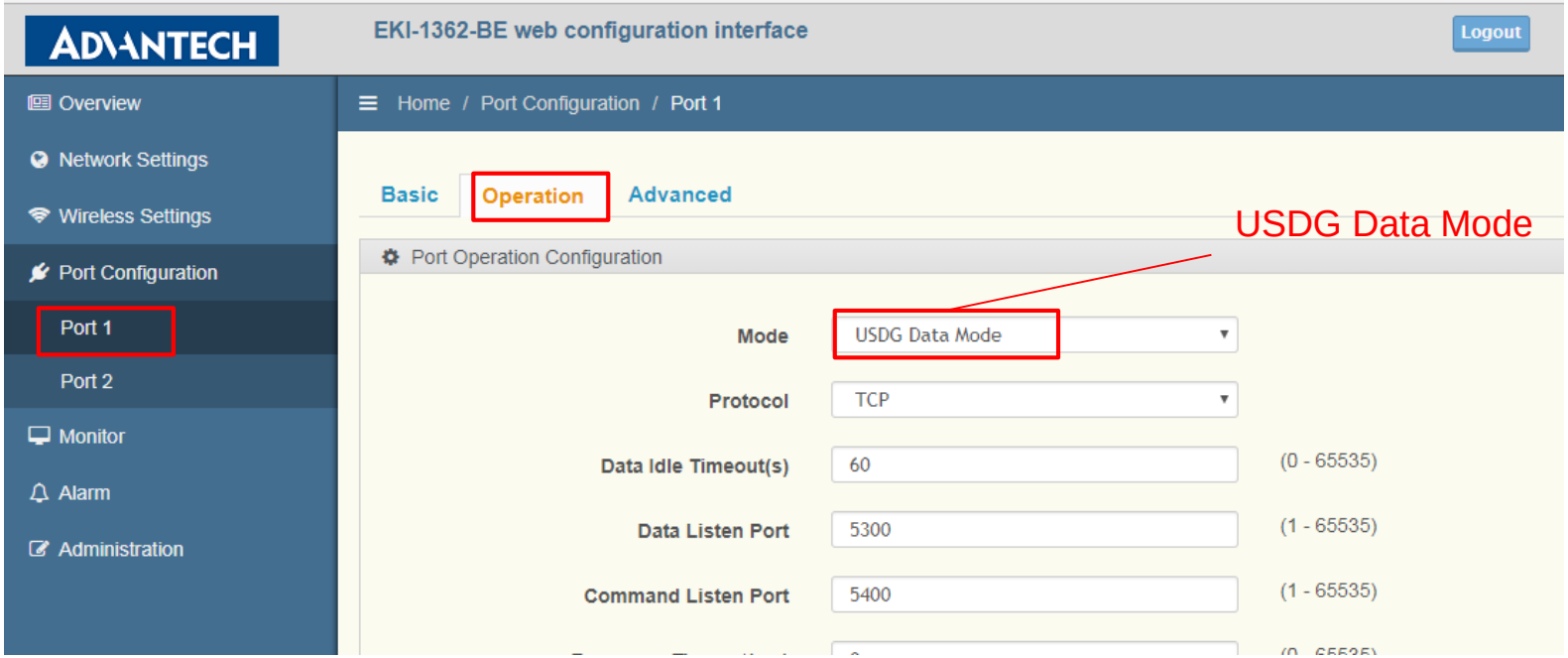


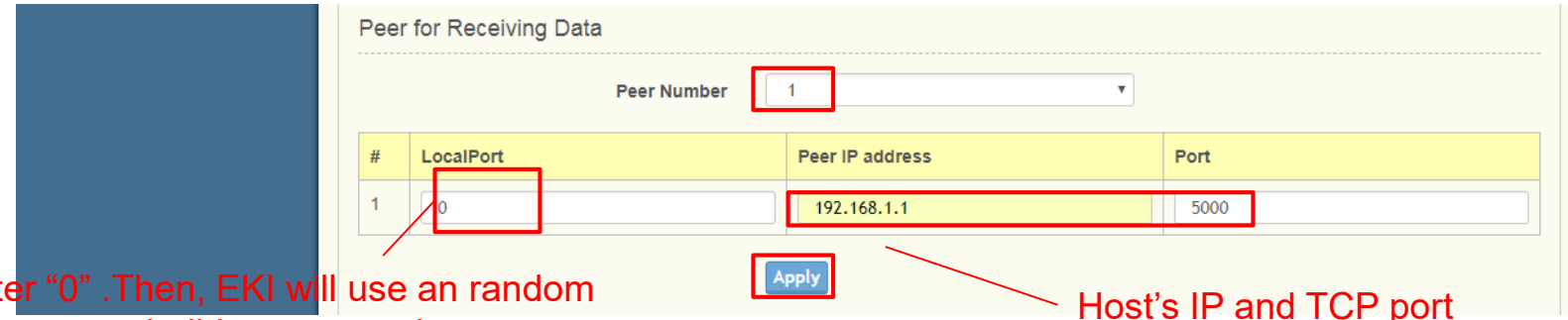
Serial Port Setting (1/2)



Click save on every config change, but config will only be activated after device reboot

Serial Port mode setting (2/2)
USDG client mode





Enter “0” .Then, EKI will use an random TCP port to build up connection to Host PC

Host’s IP and TCP port

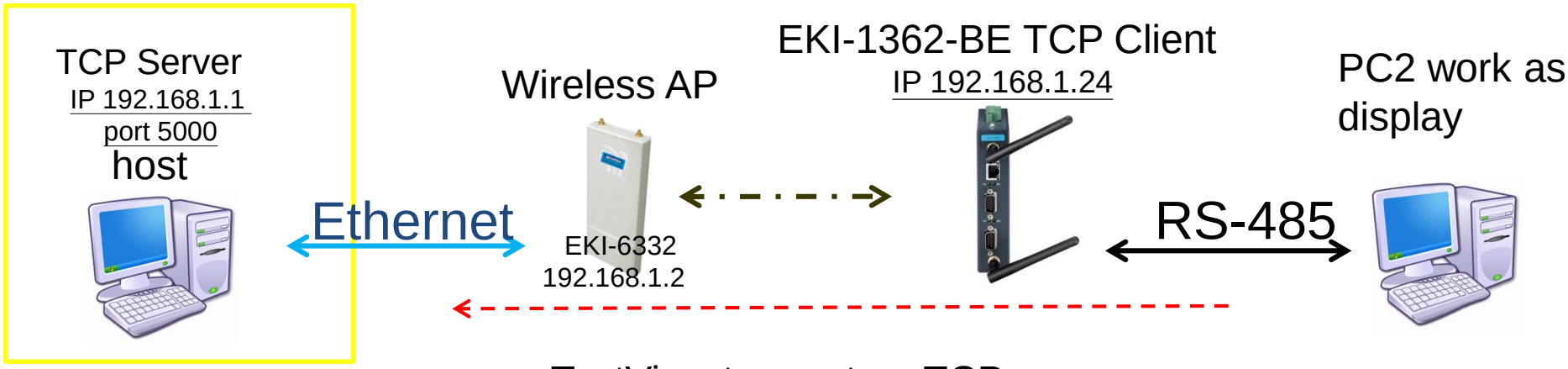
Reboot the EKI-136x-BE device

Step 1 :Reboot device after all setting done

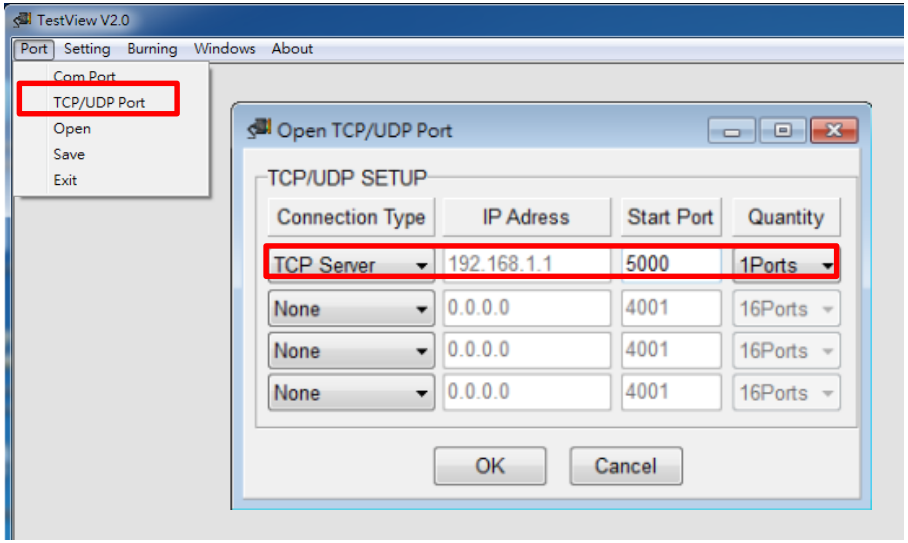
USDG Client Mode

Test by TestView

1st.

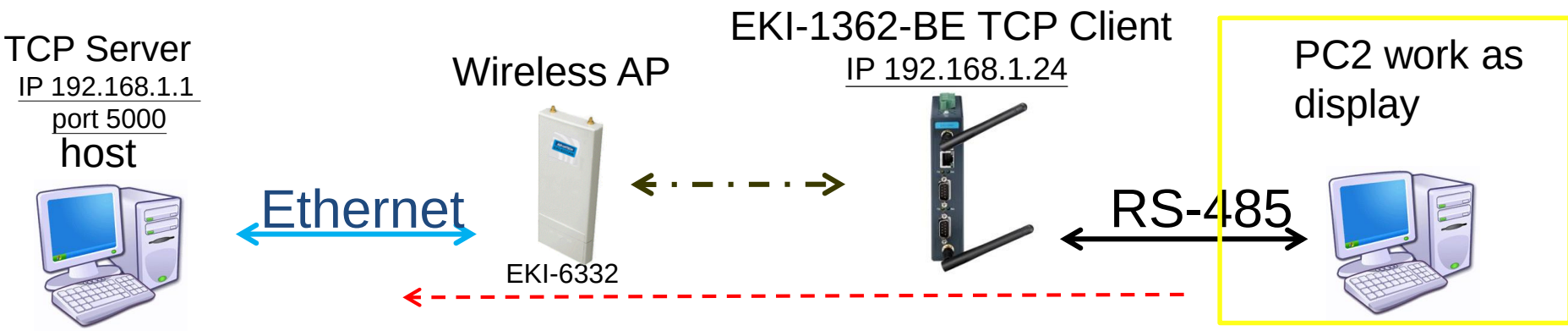


use TestView to create a TCP server

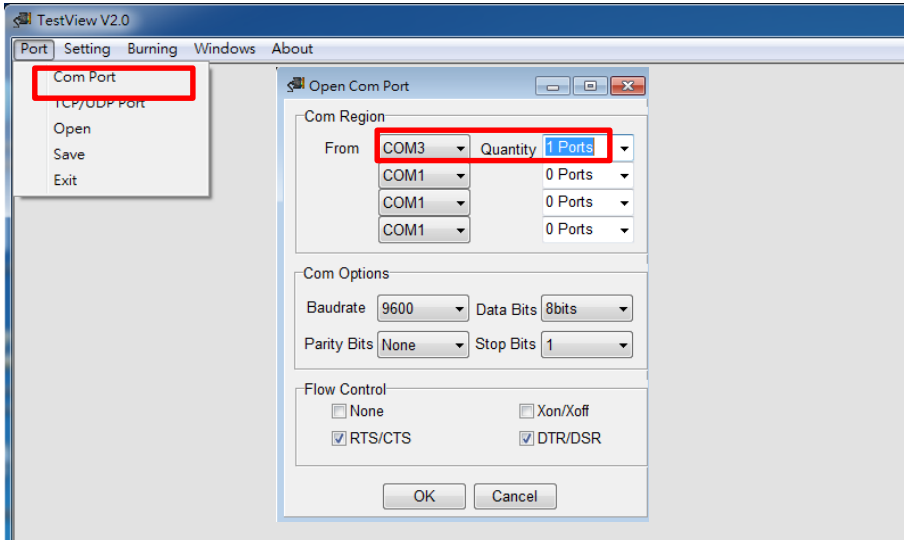


USDG Server Mode
Test by TestView

2nd .



use TestView to create a COM Port on PC2



TCP Server
IP 192.168.1.1
port 5000
host

Ethernet

Wireless AP

EKI-6332

EKI-1362-BE TCP Client
IP 192.168.1.24

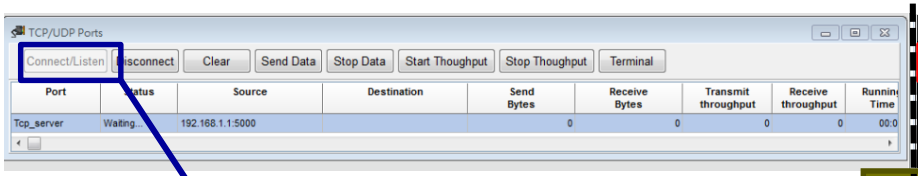
RS-485

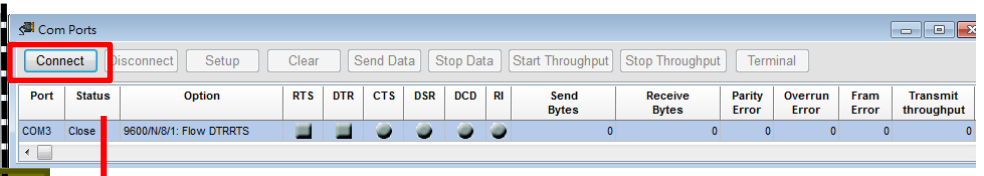
PC2 work as display

use TestView to create a TCP Client

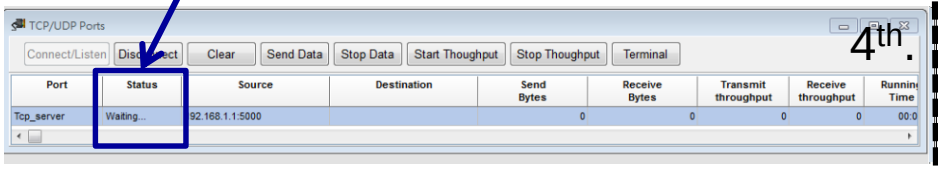
3rd.

use TestView to create a COM port

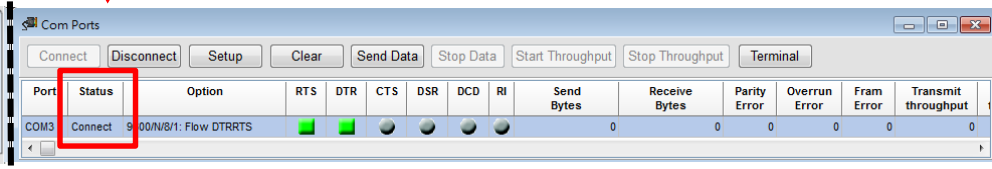


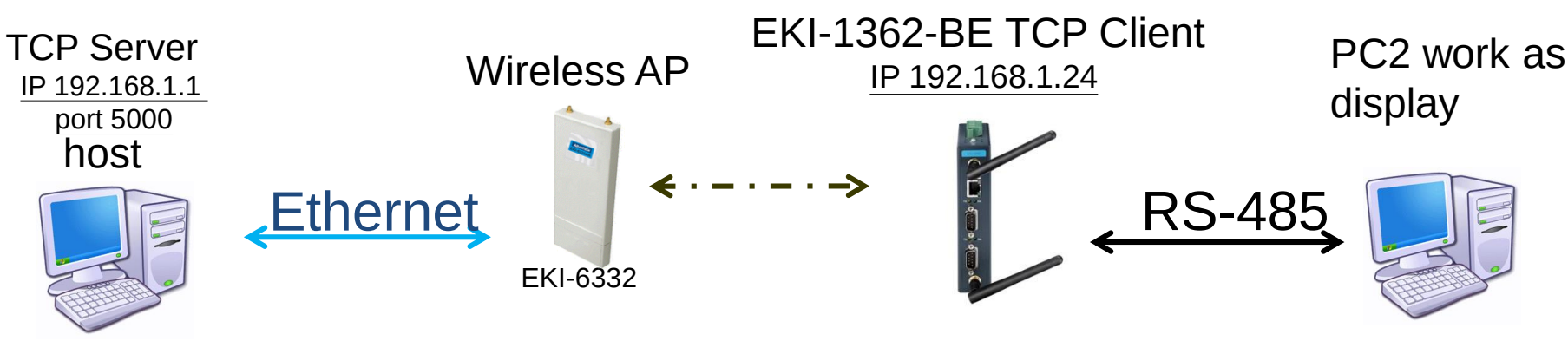


Press “Connect button” and
See the TCP Server is waiting for connection

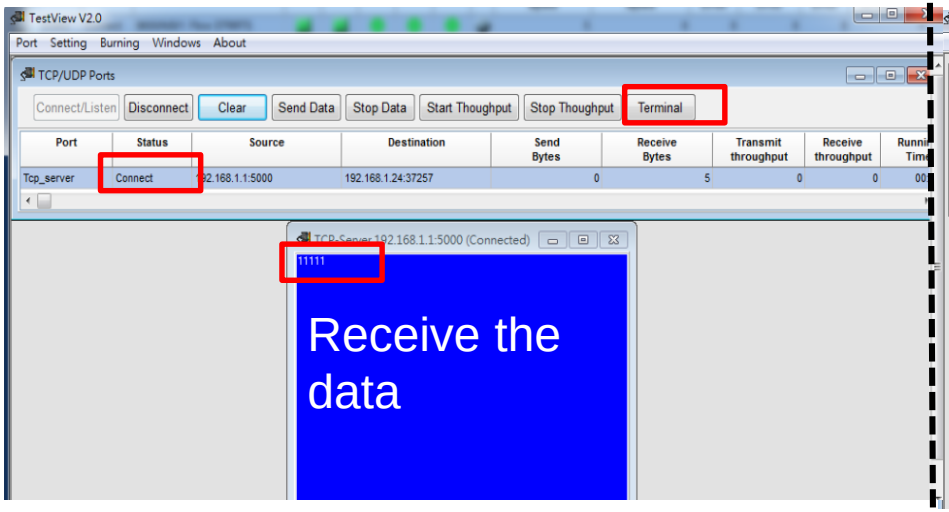


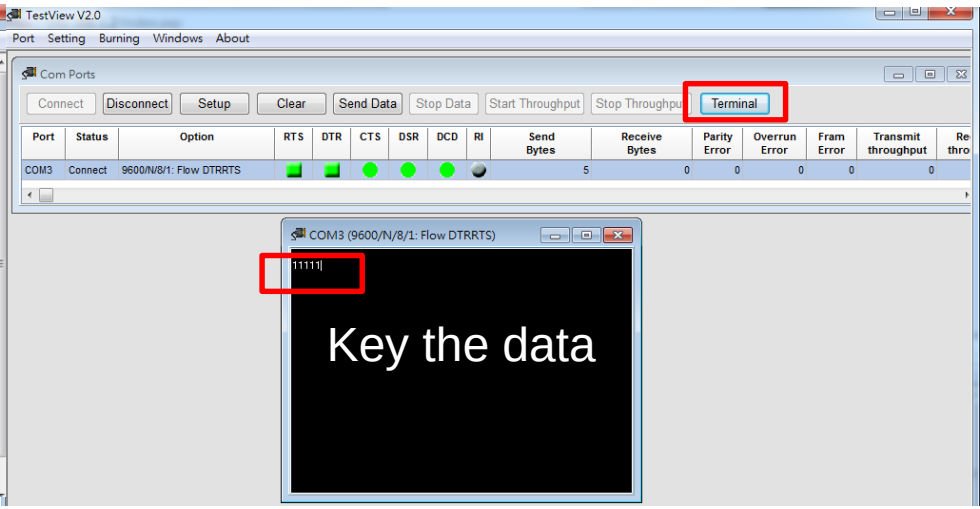
4th.





Once the PC2 starting sending data, EKI will make the connection to Host PC





Enabling an Intelligent Planet