

ICPDAS™

M2M-720-A

FAQ
Version 1.20



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FAQ

Q1: PWR LED indication of M2M-720-A is always turned off

A1: The power supply of M2M-720-A has some problems. Please check the wire connection of the power and the voltage is between 10~30 VDC

Q2: SA1 and SA2 of M2M-720-A is always turned on

A2: Application program has some errors. Please reset the M2M-720-A and check license whether it is OK or not in “information” page.

Client: Please check server’s DNS and network settings whether they are all correct or not in “Standard Config” page.

Q3: SA1 and SA2 LED of M2M-720-A flash slowly at the same time and keep the state long.

A3: It means M2M-720-A can’t establish the connection with the other M2M-720-A. Please check the network settings and M2M-720-A is working well on Ethernet.

Client: Please check server’s IP/DNS and network settings whether they are all correct or not in “Standard Config” page.

Q4: The audio quality of M2M-720-A is bad.

A4: Please turn audio quality output volume and input volume of server and client in “Audio Config” page.

Q5: M2M-720-A can’t send event report

A5: Please check the settings whether they are all correct or not in “Event Report” and “Mail Server Setting” page.

Q6: If I forgot the network settings, how can I do?

A6:

[One solution]

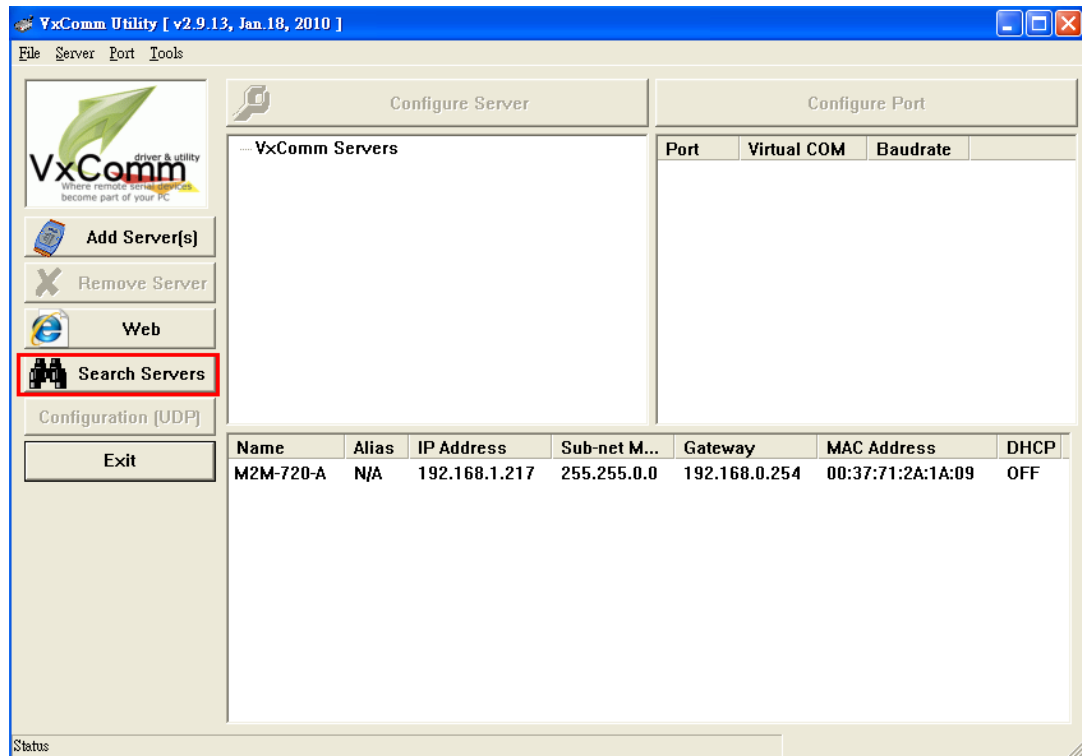
a. If the M2M-720-A is in a local network.

The user can use the VxComm Utility or MiniOS7 Utility to

scan the network settings of the M2M-720-A.

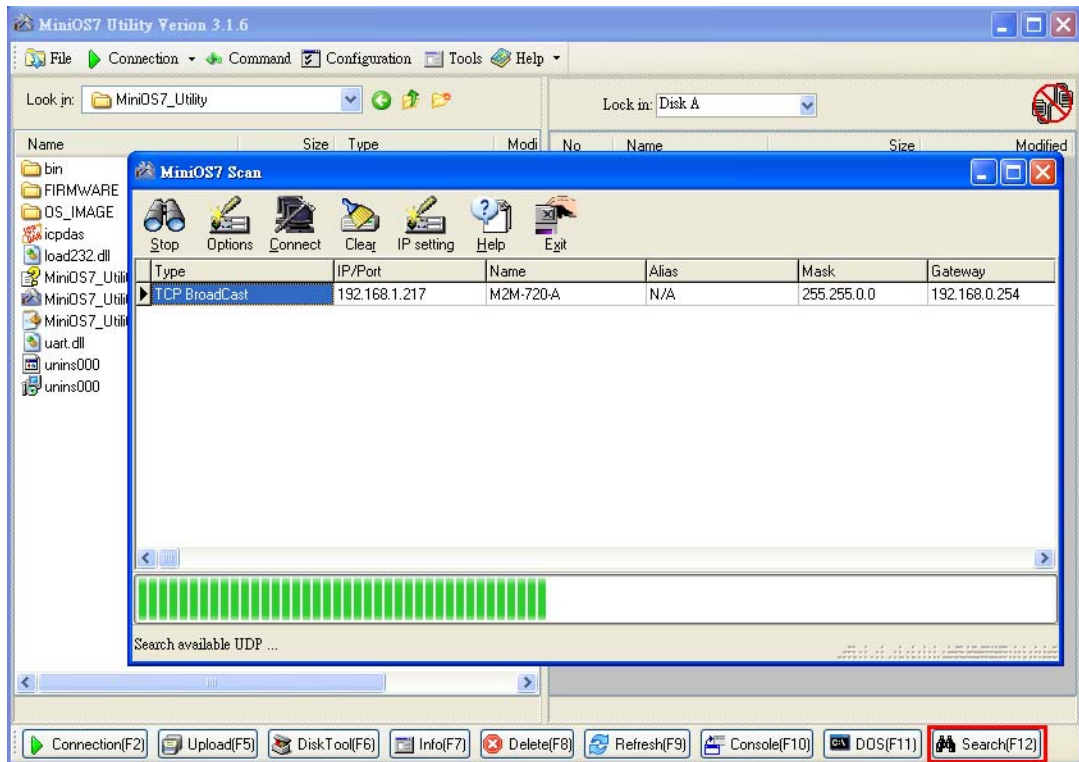
About VxComm Utility =>

1. please refer to <http://www.icpdas.com/products/Software/VxComm/vxcomm.htm>
2. The user can click “Search Servers” button to start the scan function.



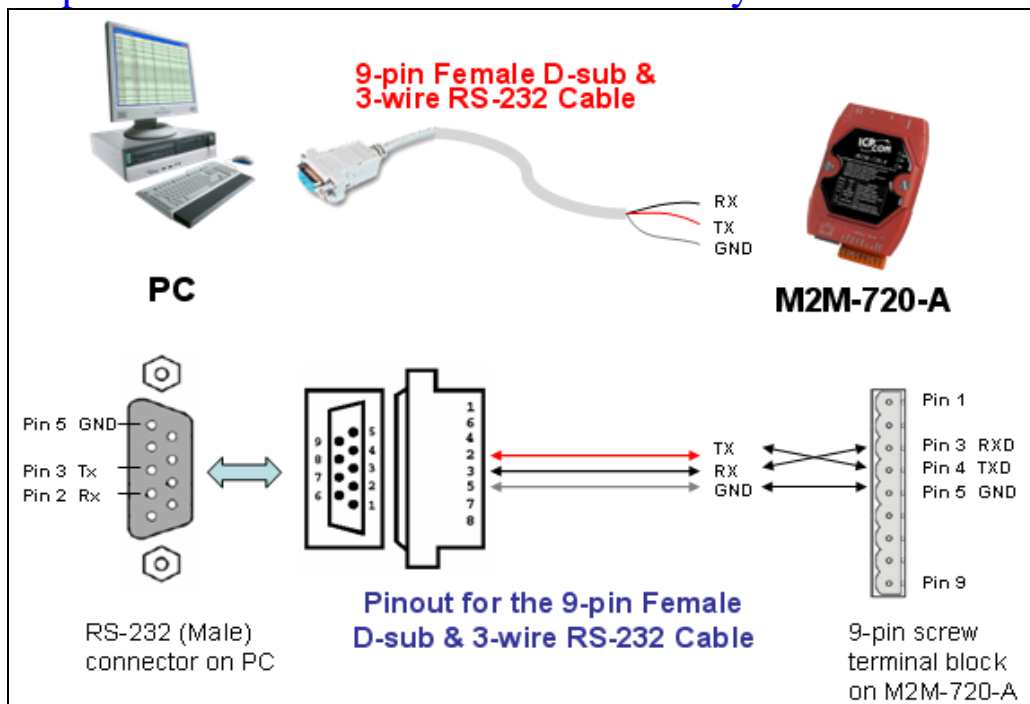
About MiniOS7 Utility =>

1. please refer to <http://www.icpdas.com/download/minios7.htm>
2. The user can click “Search” button to start the scan function.

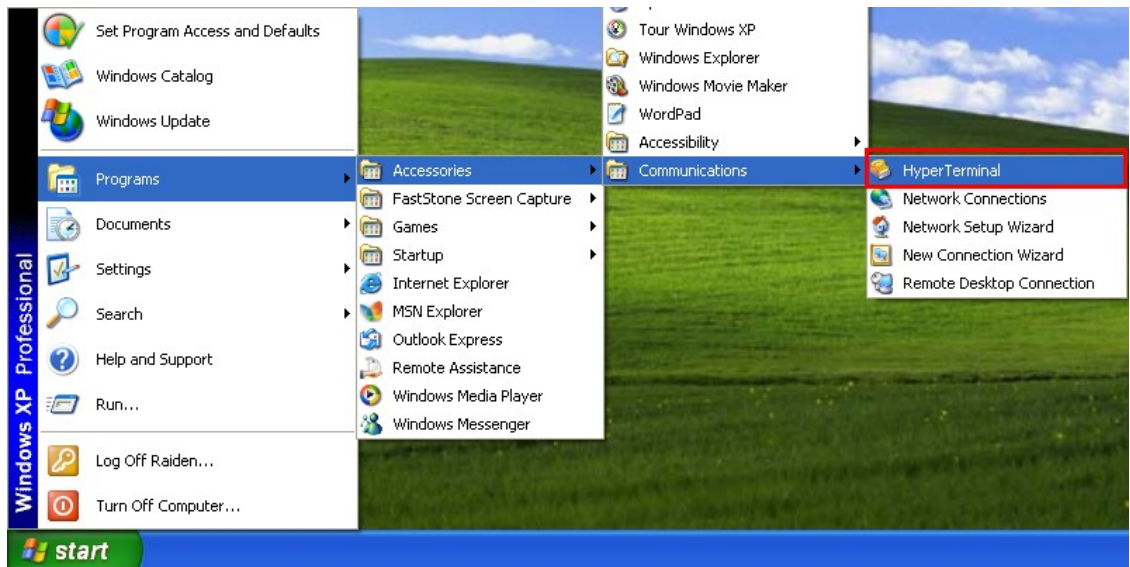


- b. If the M2M-720-A has a real IP and has an internet connection. The user can print current network settings by Com Port (RS-232).

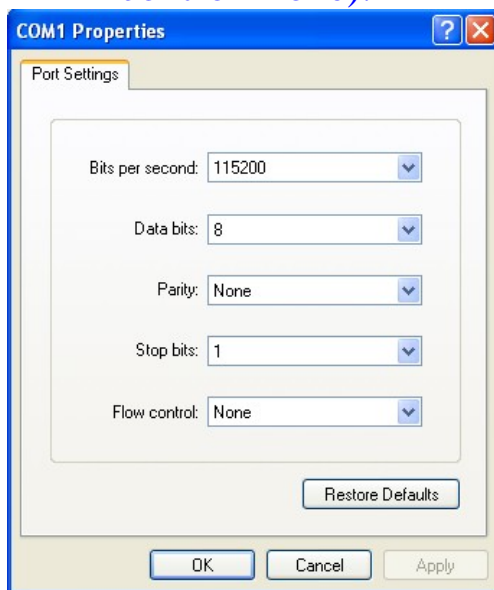
Step1: Connect PC and the M2M-720-A by RS-232 cable.



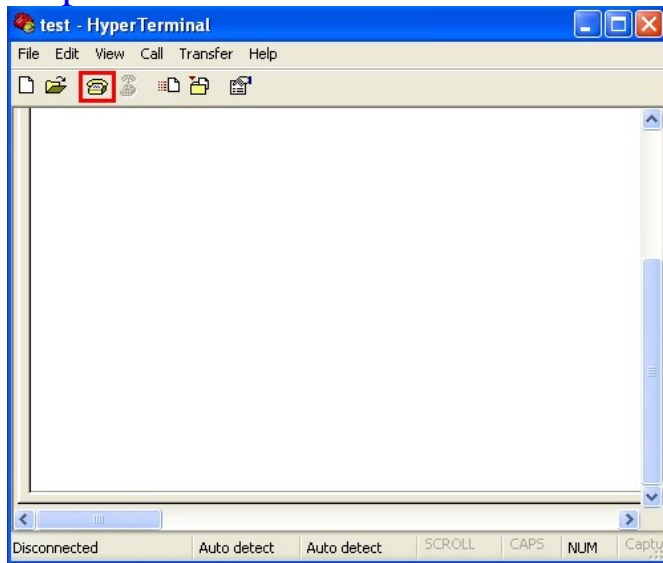
Step2: Open Com Port program. We used “Hyper Terminal” of Microsoft Window XP to test here.



Step3: Set communication setting of Com Port. (Baud rate = 115200, data bits=8, parity=none, stop bits=1, flow control=none).



Step4: Press Call icon.

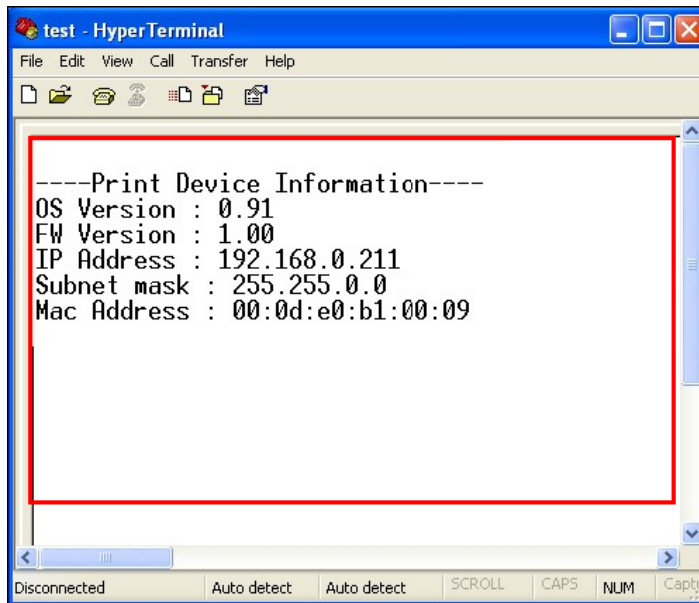


Step5: Set SW1=OFF, SW2=OFF.

Step6: Press the Trigger Button about 40 second after power on.



Step7: It will show M2M-720-A's IP in "Hyper Terminal"(ex: IP Address = 192.168.0.211).



[Another solution]

The user can recover the default network settings by DIP Switch and Trigger button (ex: SW2= ON, SW1= OFF and press the TB about 40 second after power on).



Dip switch and trigger button function

Option	State	Description
Recover default setting forever	SW2=ON SW1=ON To press the TB about 40 second after power on	All system settings will be cleared and recover default settings. (Warning: it will not restore settings after clear)
IP recover default setting for this time	SW2= OFF SW1= ON To press the TB about 40 second after power on	After power on, it will set IP to default setting (192.168.1.217) for this time, but it will restore original IP at next time.
IP recover default setting forever	SW2= ON SW1= OFF To press the TB about 40 second after power on	After power on, it will set IP to default setting (192.168.1.217) and save to flash.
Display the current IP and version	SW2=OFF SW1=OFF To press the TB about 40 second after power on	After power on, it will display the message about current IP and version information from Com Port(RS-232).
Normal setting	The other states	Normal state; It will not change any setting and data.

Q7. I can't open the webpage of the M2M-720-A.

A7.

Step1: Please confirm the network settings of the M2M-720-A. (The user can refer to “Q6. If I forgot the network settings, how can I do?”)

Step2: Confirm the network settings of the PC have the same domain and different IP with the M2M-720-A.

Ex1=>

M2M-720-A: IP-192.168.1.217, Mask-255.255.255.0

PC: IP-192.168.0.210, Mask-255.255.255.0 (Wrong settings)

Ex2=>

M2M-720-A: IP-192.168.1.217, Mask-255.255.255.0

PC: IP-192.168.1.210, Mask-255.255.255.0 (Right settings)

Ex3=>

M2M-720-A: IP-192.168.1.217, Mask-255.255.0.0

PC: IP-192.168.0.210, Mask-255.255.0.0 (Right settings)

Q8. Client can't connect to Server.

A8. Please follow the steps to check the network configurations are all correct.

Step1: Confirm the IP of Server and Client is the only. The IP is not the same with the other network device.

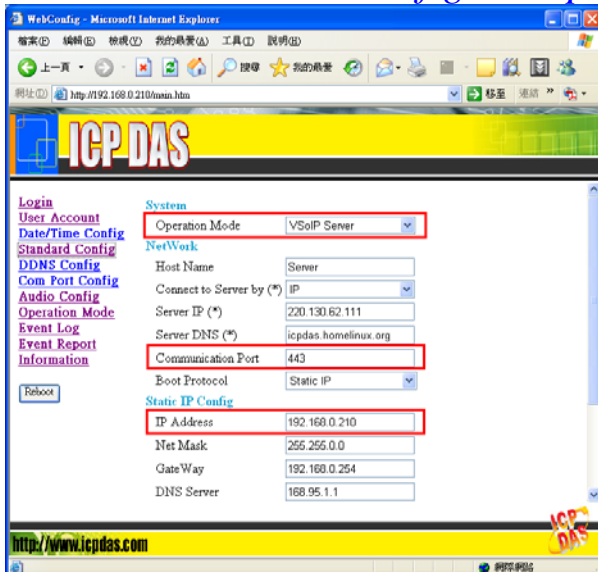
Step2: Please confirm the following settings are all correct.

- “Server IP(*)” of client is the same with “IP Address” of server.
- “Communication Port” of server and client are the same.
- “Operation Mode” of client is “VSoIP Client”.
- “Operation Mode” of server is “VSoIP Server”.

Client's “Standard Config” webpage

The screenshot shows the 'Standard Config' webpage for ICP-DAS. The browser window title is 'WebConfig - Microsoft Internet Explorer'. The address bar shows 'http://192.168.0.211/asmx.htm'. The page content includes a navigation menu on the left with links like 'Login', 'User Account', 'Date/Time Config', 'Standard Config', 'Com Port Config', 'Audio Config', 'Operation Mode', and 'Information'. The main content area is divided into sections: 'System', 'NetWork', and 'Static IP Config'. The 'System' section has a dropdown for 'Operation Mode' set to 'VSoIP Client'. The 'NetWork' section has 'Host Name' set to 'Client1', 'Connect to Server by (*)' set to 'IP', 'Server IP (*)' set to '192.168.0.210', 'Server DNS (*)' set to 'icpdas.homelinux.org', and 'Communication Port' set to '443'. The 'Static IP Config' section has 'IP Address' set to '192.168.0.211', 'Net Mask' set to '255.255.0.0', 'GateWay' set to '192.168.0.254', and 'DNS Server' set to '168.95.1.1'. A 'Reboot' button is located in the 'Information' section. The footer of the page shows the URL 'http://www.icpdas.com'.

Server's "Standard Config" webpage



Step3: If server and client are in the local network, please confirm the network settings of client have the same domain and different IP with server.

Ex1=>

Server: IP-192.168.1.217, Mask-255.255.255.0

Client: IP-192.168.0.218, Mask-255.255.255.0 (Wrong settings)

Ex2=>

Server: IP-192.168.1.217, Mask-255.255.255.0

Client: IP-192.168.1.218, Mask-255.255.255.0 (Right settings)

Ex3=>

Server: IP-192.168.1.217, Mask-255.255.0.0

Client: IP-192.168.0.218, Mask-255.255.0.0 (Right settings)

Step4: If server has a real IP and has an internet connection, please confirm the network ability of the server and client.

The user can test the network ability by the webpage (ex: <http://192.168.1.217/>) of server or client.

Please click the "Network Tools" hyperlink text on the left window of the webpage and then click "Ping Command"

hyperlink text.

Now the user must input an IP or domain name to test the network ability (ex: google.com or yahoo.com) and click “Start” button to start the test and then click the “Refresh” button to get the result. If the result is 0% packet loss, it means the network is available.

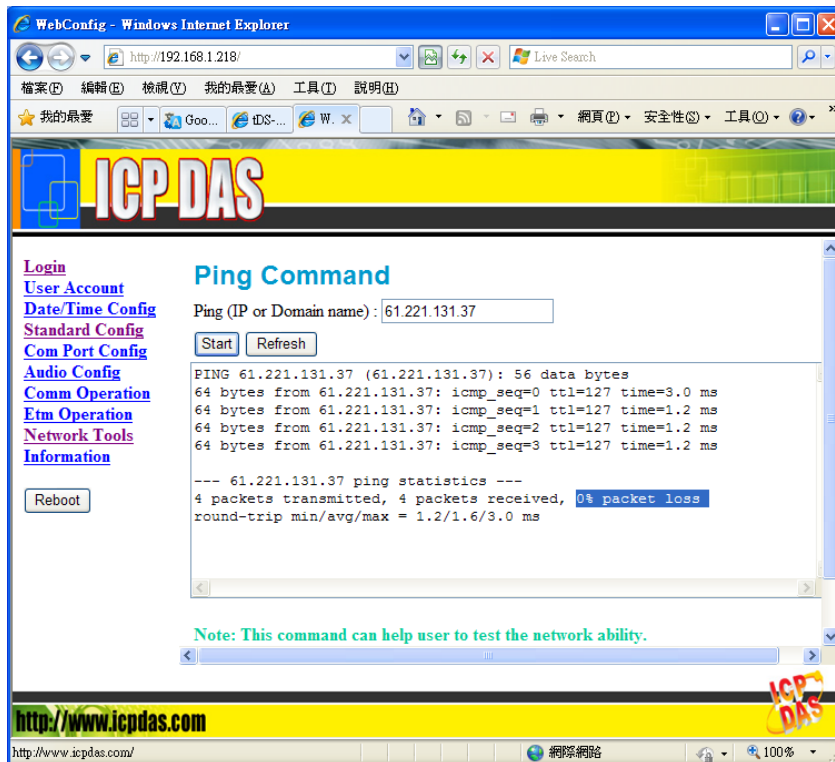


Step5: Please confirm the server’s IP is effective.

The user can test by the webpage (ex: <http://192.168.1.218/>) of the client.

Please click the “Network Tools” hyperlink text on the left window of the webpage and then click “Ping Command” hyperlink text.

Now the user must input the IP (ex: 61.221.131.37) of the server on the webpage of the client and click “Start” button to start the test and then click the “Refresh” button to get the result. If the result is 0% packet loss, it means the server’s IP is effective.



Step6: If Client connects to Server via internet, please confirm there is no firewall before the Server.

The Server uses several communication ports of Ethernet, as shown in the below.

Communication Port

Service	Port number	note
Web Server	80	
FTP Server	21	
Telnet Server	23	
SSH Server	22	
VSoIP function	443	default
VxComm function	10000, 10001	

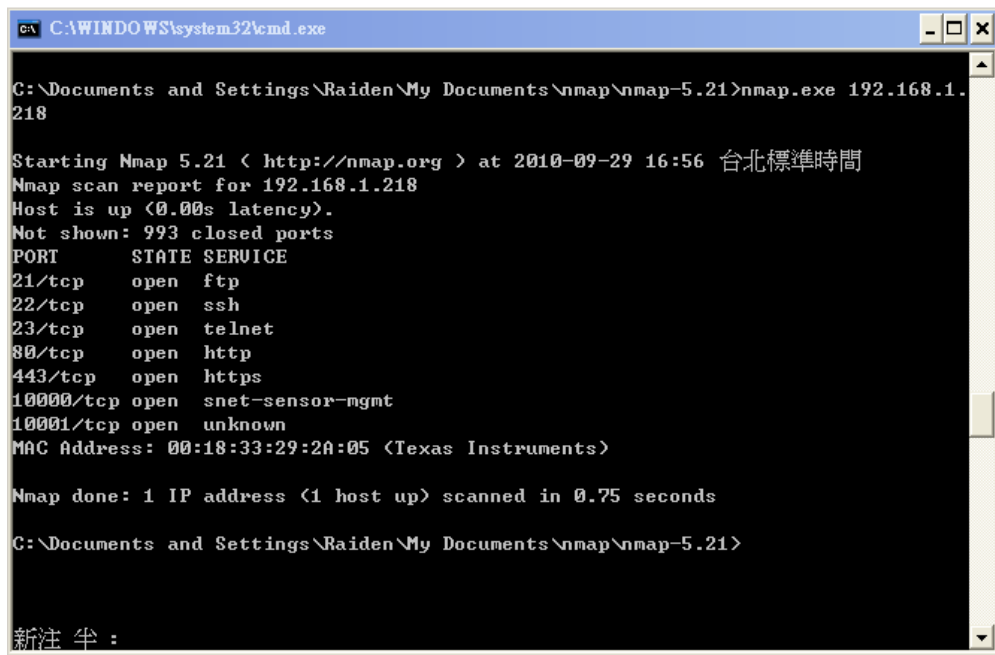
Please make sure the communication ports are available. The user can contact with MIS or Internet Service Provider, or the user can test the communication ports are available or unavailable by network exploration utility. Ex: NMAP.

About the NMAP, please refer to <http://nmap.org/>, the user can

download the utility at <http://nmap.org/download.html>

The user can test the communication ports by nmap.exe <Server IP> (ex: C:\nmap.exe 61.221.131.37). If the communication port 21, 22, 23, 80, 443(default), 10000, 10001's state are open. It means the server is OK.

NMAP test



```
C:\AWINDOWS\system32\cmd.exe
C:\Documents and Settings\Raiden\My Documents\nmap\nmap-5.21>nmap.exe 192.168.1.218

Starting Nmap 5.21 ( http://nmap.org ) at 2010-09-29 16:56 台北標準時間
Nmap scan report for 192.168.1.218
Host is up (0.00s latency).
Not shown: 993 closed ports
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
80/tcp    open  http
443/tcp   open  https
10000/tcp open  snet-sensor-mgmt
10001/tcp open  unknown
MAC Address: 00:18:33:29:2A:05 (Texas Instruments)

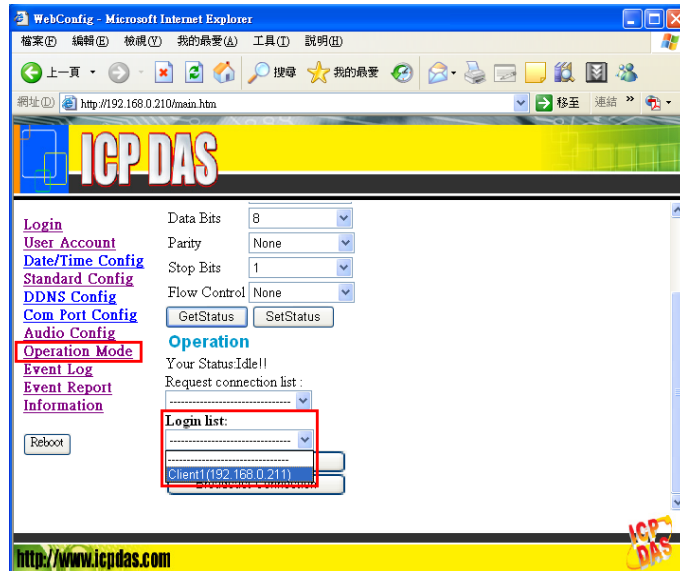
Nmap done: 1 IP address (1 host up) scanned in 0.75 seconds

C:\Documents and Settings\Raiden\My Documents\nmap\nmap-5.21>
新注 半 :
```

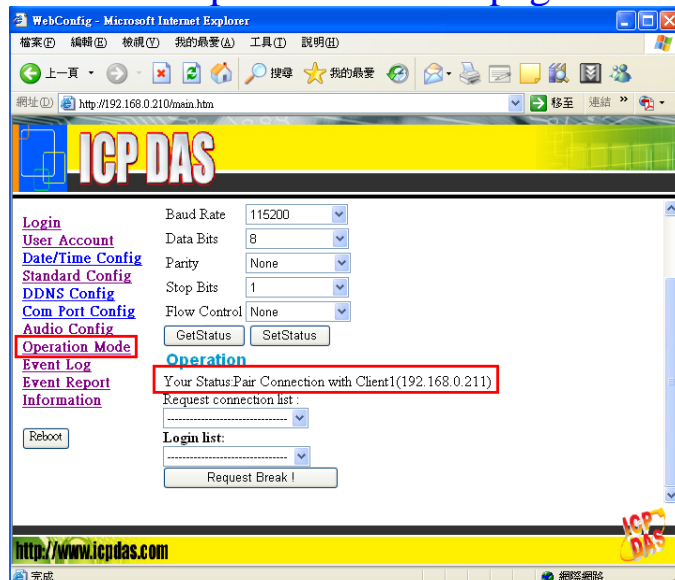
Q9: Server and Client can't establish Com Port connection.

A9: Please follow the steps to check below.

Step 1: Confirm Client has already login the Server and the user can find the host name of Client in the "Login list" at Server's "Operation Mode" page..

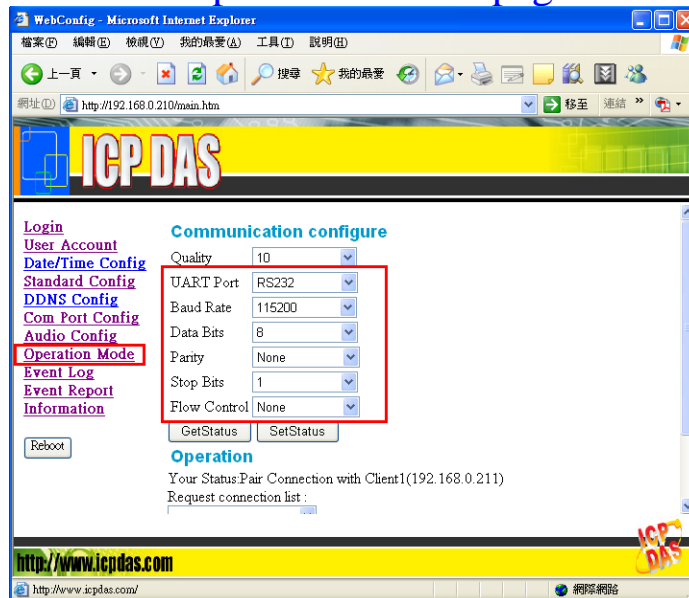


Step 2: Confirm Server and Client are at "Pair Connection" mode and it shows "Your Status: Pair Connection with Client (IP)" at Server's "Operation Mode" page.



Step 3: Confirm that the Com Port device is connected with Server and Client has the same communication settings with Server's "Operation Mode" page. If it is different, please break the connection and change the settings then reconnect the client.

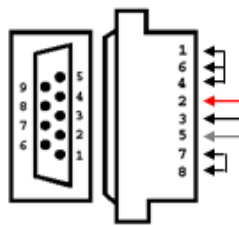
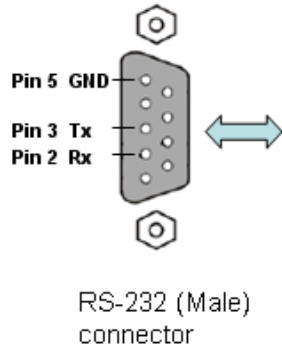
Server's "Operation Mode" page



Step 4: Confirm the Cable connected Server/Client to Com Port device is wired correctly. If the connection is RS485, the user can refer to user manual section 2.2.2. If the connection is RS-232 and the Com Port device is a data circuit-terminating equipment (DCE), the user just needs to match the signal names to connect Server/Client to Com Port device, else the user needs to use a crossover cable to connect.

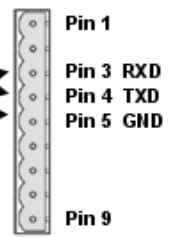
Some Com Port devices will wait for one of the handshaking lines to go to the correct level forever. Depending on the signal state it might sometimes work, other time it might not. Here, we connect the M2M-720-A and the Com Port device via handshake looped to avoid the Com Port device waits handshake line signals, as shown in below.

Data Terminal Equipment (DTE)

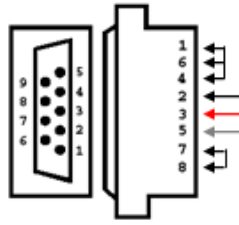
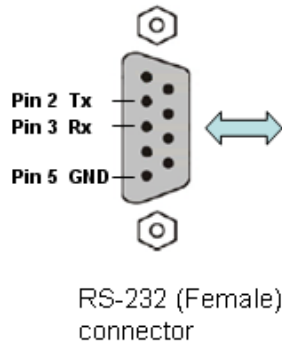


TX
RX
GND

M2M-720-A (RS-232)

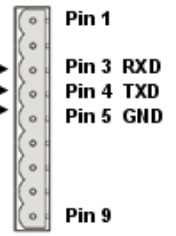


Data Circuit-Terminating Equipment (DCE)



RX
TX
GND

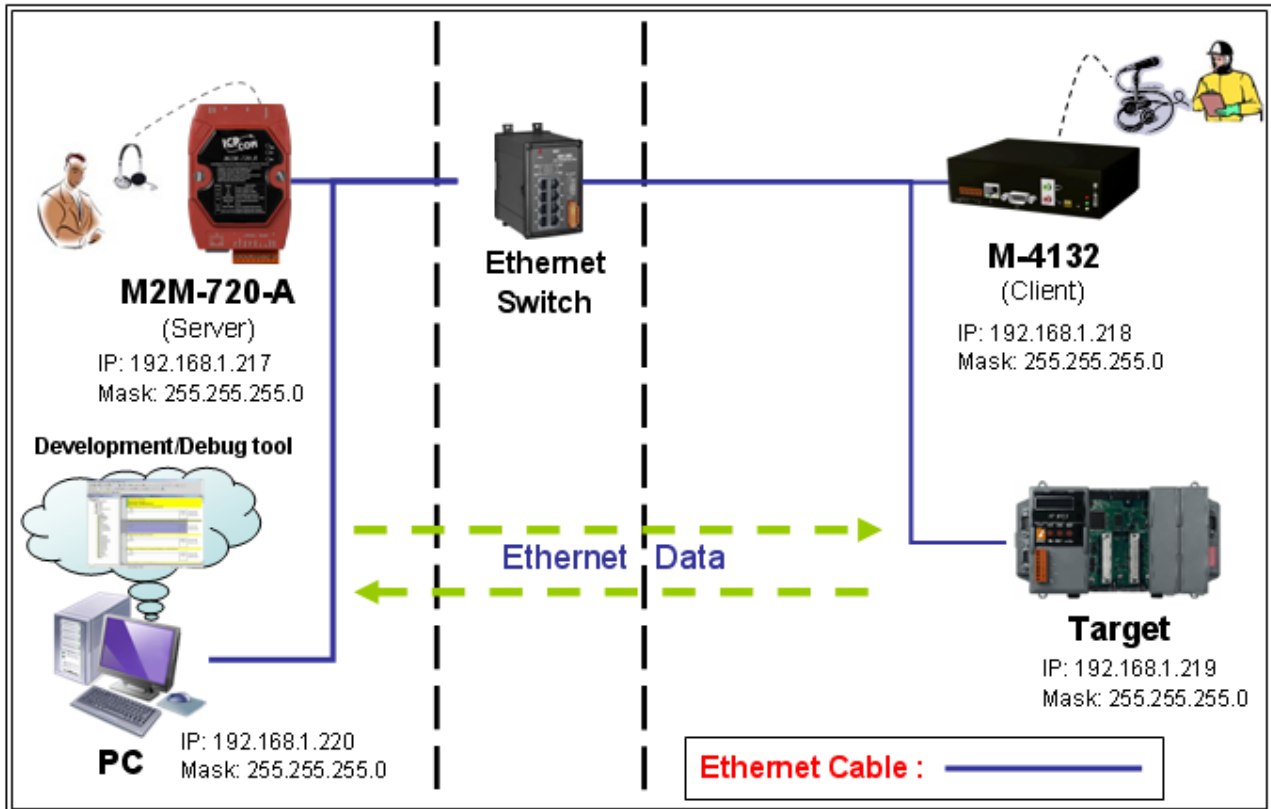
M2M-720-A (RS-232)



Q10: How to establish an ETM connection?

A10: Here, we provide an example to show how to establish an ETM connection.

About the system architecture, please refer to below:



In this example, we have below Ethernet settings.

M2M-720-A(Server):

IP=>192.168.1.217

Mask=>255.255.255.0

M-4132(Client) :

IP=>192.168.1.218

Mask=>255.255.255.0

Target (ex: PLC or our ISaGRAF PAC or Modbus TCP device or other Ethernet device): Here we use ip-8847 (ISaGRAF SoftLogic PAC) for this example.

IP=>192.168.1.219

Mask=>255.255.255.0

PC:

IP=>192.168.1.220

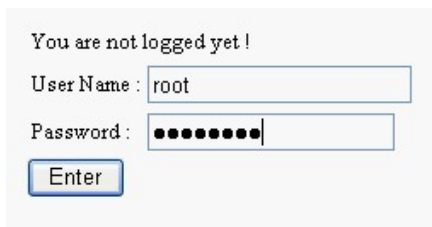
Mask=>255.255.255.0

Please follow the steps to establish an ETM connection.

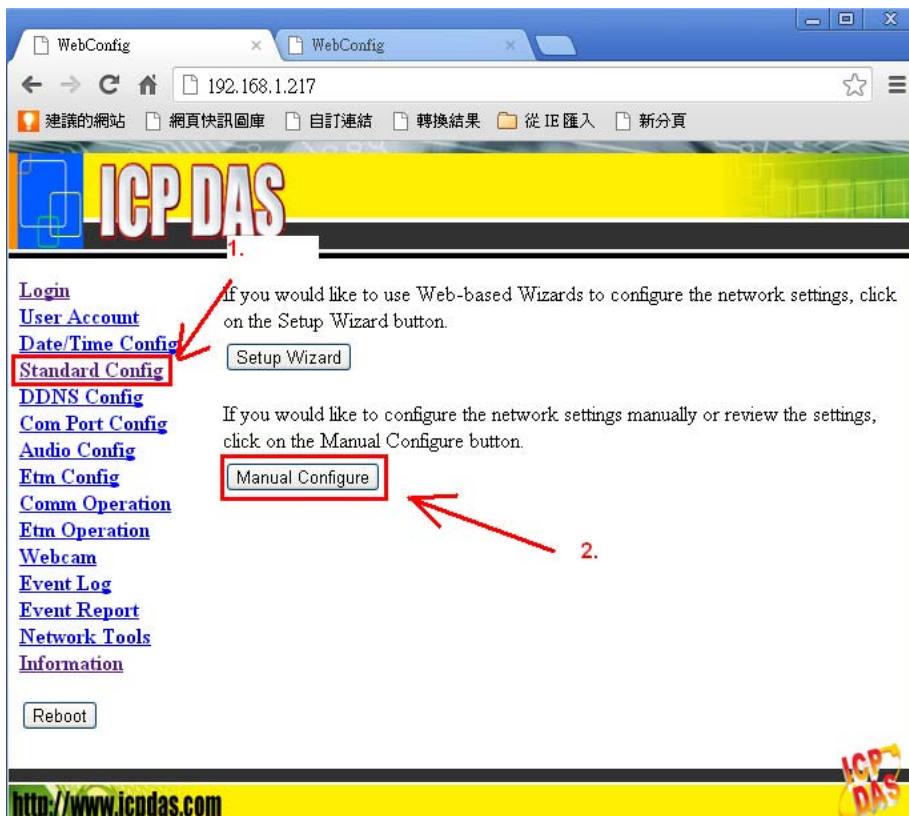
Step1: Open web browser (ex: IE or Chrome, etc.) on PC and key in http://IP (ex: http://192.168.1.217/) in the address line and then press “Enter” key to connect to **client(M-4132)**. (About IP: default is 192.168.1.217)



Step2: Key in user name (default: root) and password (default: icpdas) and then click “Enter” button to login.



Step3: Click “Standard Config” link and “Manual Configure” button.



Step4: Set the device at the “Manual Configure” page by below settings.
And then click “Save Setting” button.

System

Operation Mode=> VSoIP Client

Encryption

Mode=>None(default)

Key=>_userkey(default)

NetWork

Host Name=>4132Client1

Connect to Server by=>IP(default)

Server IP=>192.168.1.217

Server DNS=>www.serverdns.com(default)

Communication Port=>443(default)

VPN=>Disable(default)

Boot Protocol=>Static IP(default)

Static IP Config

IP Address=>192.168.1.218
Net Mask=>255.255.255.0
GateWay=>192.168.1.254
DNS Server=>168.95.1.1

ADSL Config

User Name=>user(default)
Password=>password(default)

Step5: Click “Reboot” button to reset device in the left page.



Step6: Connect to **server (M2M-720-A)**, the same with Step1.

Step7, 8: the same with Step 2, 3.

Step 9: Set the device at the “Manual Configure” page by below settings.
And then click “Save Setting” button.

System

Operation Mode=> VSoIP Server

Encryption

Mode=>None(default)

Key=>_userkey(default)

NetWork

Host Name=>720AServer

Connect to Server by=>IP(default)

Server IP=>192.168.1.217(default)

Server DNS=>www.serverdns.com(default)

Communication Port=>443(default)

VPN=>Disable(default)

Boot Protocol=>Static IP(default)

Static IP Config

IP Address=>192.168.1.217

Net Mask=>255.255.255.0

GateWay=>192.168.1.254

DNS Server=>168.95.1.1

ADSL Config

User Name=>user(default)

Password=>password(default)

Step10: the same with Step 5.

Step11: Check the led status of client (M-4132). If the SA1 led is flash slowly, it means it is trying to establish the connection with the server. If the SA1 led is off, it means the connection is OK.

If the SA1 led is flash slowly and continued over three minutes, please recheck the settings are all correct.

Step12: Open the web page of Server (M2M-720-A) and Click “Etm Config” link.

a. Set Target IP=>192.168.1.219, Configure file=>Configure1

b. Click “Save Setting” button

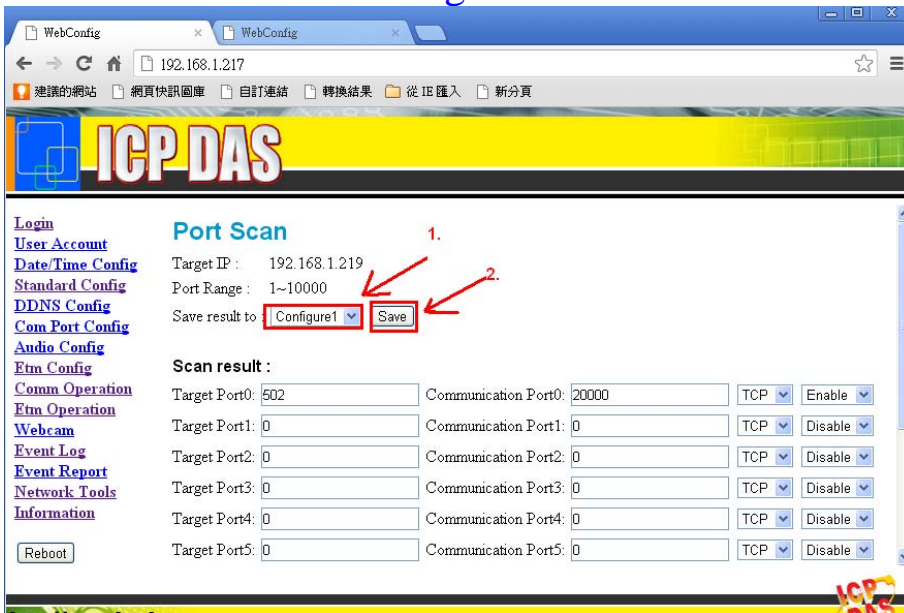
c. Click “Port Scan” button



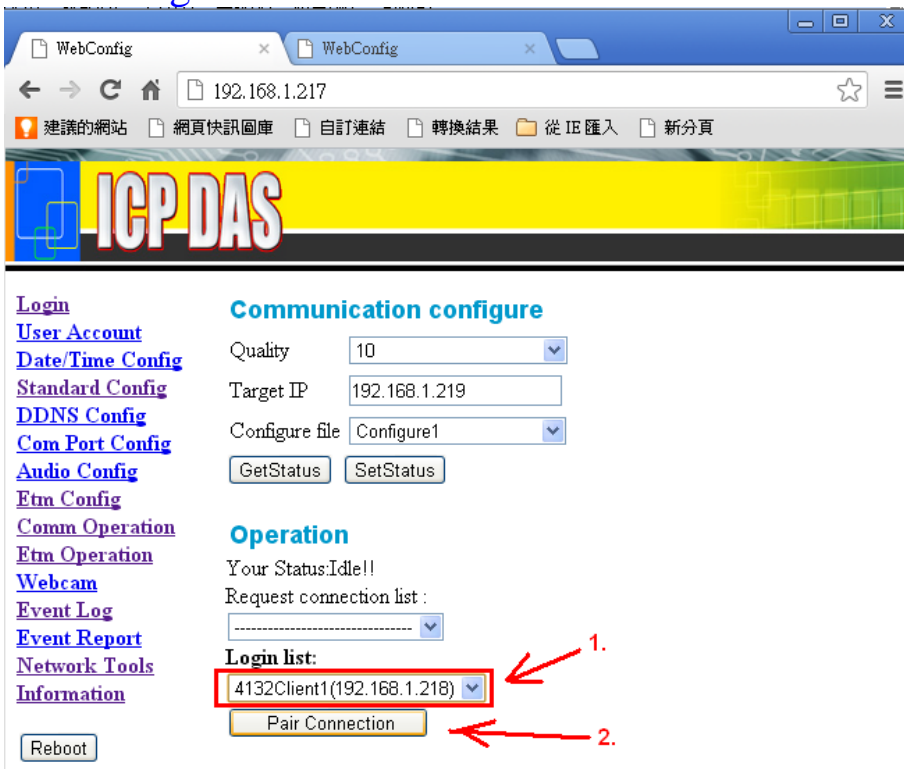
Step13: Select 4132Client1 in the login list and then click “Start Scan” button and then the “Start Scan” button will become to “Stop Scan” button.



Step14: Wait “Stop Scan” button become to “Start Scan” button again and then select “Configure1” and click “Save” button.



Step15: Click “Etm Operation” link, and then select 4132Client1 in the login list and then click “Pair Connection” button.



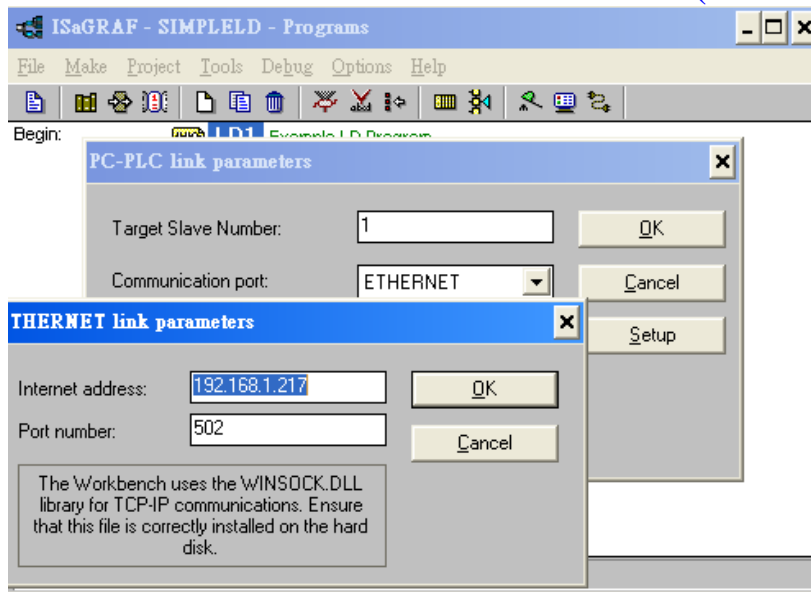
Step16: At this time, the SA2 led of server and client should flash fast. It means the Pair connection is OK. Now, the user can connect to the

target via server (M2M-720-A) on the PC.

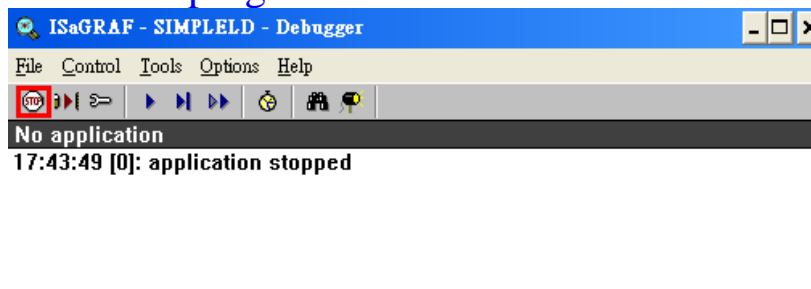
Step17: In this example, the target is ip-8847 (ISaGRAF SoftLogic PAC). So, we use ISaGRAF Workbench to connect target for diagnostic and reprogramming.

a. Open the ISaGRAF project and click “link setup”

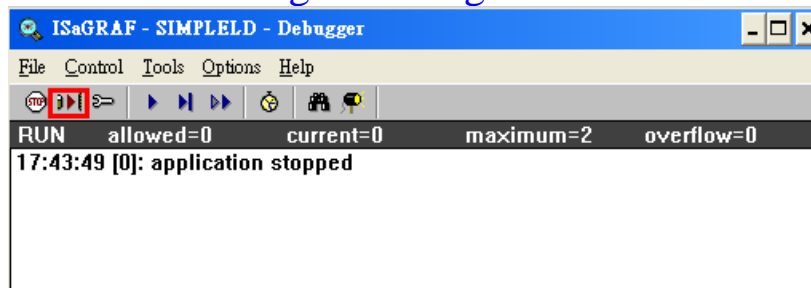
b. Set internet address = 192.168.1.217 (Server IP)



c. Click Debug to connect target and click stop button to stop current program.



d. Click Download to reprogramming target. Now, the user can connect to target for diagnostic.



~finish~