

ADAM-6501

Universal Web-enabled Communication Controller

User's Manual

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3. If your product is diagnosed as defective, obtain an RMA (return merchandise authorization) number from your dealer. This allows us to process your return more quickly.
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5. Write the RMA number visibly on the outside of the package and ship it prepaid to your dealer.

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If you have any technical questions about the ADAM-6501 or any other Advantech products, please visit our support website at:

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For more information about Advantech's products and sales information, please visit:

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Chapter 1 ADAM-6501 Overview

This chapter gives background information on the ADAM-6501. It shows you the ADAM-6501 overview and specifications.

Sections include:

- ◆ Introduction
- ◆ Features
- ◆ Hardware Specifications
- ◆ Safety Precautions
- ◆ ADAM-6501 Series
- ◆ Chassis Dimensions

Introduction

Advantech ADAM-6501 is a powerful embedded and web-enabled solution platform that connects devices data with enterprise systems. It is possible to access or even diagnose the system problem immediately through any browser. Using Microsoft Windows CE embedded features and compact flash storage, the ADAM-6501 offers a high reliability platform for industrial automation with no risk of hard disk crashes.

1.1 Features

The Advantech ADAM-6501 provides users with the most requested functions as seen below:

- ❑ Windows CE-based open embedded system
- ❑ Reliable and Powerful Out-of-Box solution platform

The Advantech ADAM-6501 offers the following main features:

Embedded web-enabled HMI/SCADA software (Option)

HMI/SCADA software and HTTP v1.10 compliant (a persistent connection allows multiple downloads with less overhead, and also improves caching while making it easier to create virtual hosts) web server are established on ADAM-6501 and allow you to remotely view and control I/O data from anywhere on anytime.

Rich Legacy Controllers and OPC device connection support

With one RS-232 (RJ-48 connector), one RS-485 ports and one Ethernet and industrial standard MODBUS/RTU & MODBUS/TCP drivers, ADAM-6501 can connect versatile I/Os and control devices including Advantech ADAM-4000, 5000 and 6000 series and the other 3rd Party Controller/Device.

Windows® CE-based open embedded system

With no hard disk needed, the ADAM-6501 features increased reliability. More importantly, Windows® CE (Windows CE.NET 4.2) unflinchingly performs time-sensitive tasks with deterministic responses to events. This is a key feature in most industrial applications.

Reliable and Powerful Out-of-Box solution platform

ADAM-6501 provides reputed industrial hardware with XScale processor and Windows® CE-based embedded software bundled solution. This translates into long-time stability and powerful computing capability to fulfill most different applications.

1.2 Hardware Specifications

CPU: XScale 400MHz

RAM: 32 MB compact flash memory, 64 MB SDRAM on board

Operating System : Microsoft Windows CE.NET 4.2

Storage: 1 External CompactFlash Card Slot(Support up to 512MB CF card, Wireless LAN Card)

Serial Port: one RS-232 (RJ-48 connector), one RS-485 ports

- Automatic RS-485 data flow control

- Data bits: 5, 6, 7, 8
- Stop bits: 1, 1.5, 2
- Parity: none, even, odd
- RS-232 max data distance: 50 feet (15.2 meters)
- RS-485 max data distance: 4000 feet (1220 meters)

Ethernet Port: One 10/100Base-T Ethernet

LED: One power LED

Power supply voltage: 10-30 VDC, 24VDC recommended

Power Requirement: 0.25A typical under +24V power input

Power Consumption: 4W (typical)

Operating temperature: 0 ~ 55°C (0 ~ 149°F)

1.3 Safety Precautions

The following sections tell how to make each connection. In most cases, you will simply need to connect a standard cable. All of the connector pin assignments are shown in Appendix A.

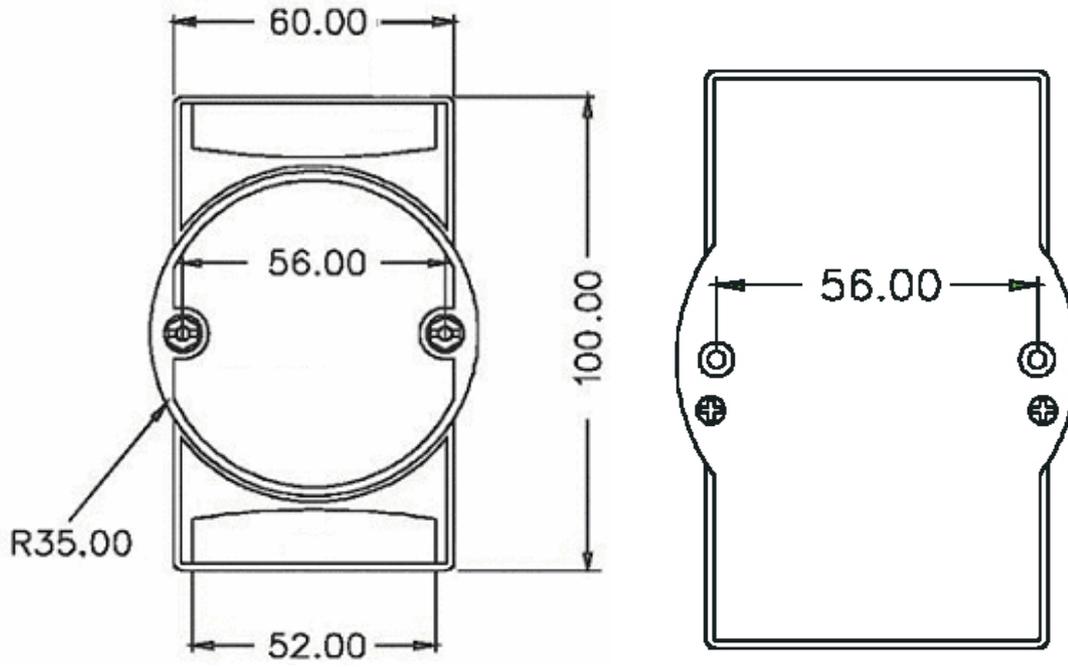
Warning!

Always completely disconnect the power cord from your PC chassis whenever you are working on it. Do not make connections while the power is on. A sudden rush of power can damage sensitive electronic components. Only experienced electronics personnel should open the PC chassis.

Caution!

Always ground yourself to remove any static electric charge before touching ADAM-6501. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag..

1.4 Chassis Dimensions



Chapter 2 Hardware Functionality

This chapter shows how to set up the ADAM-6501's hardware functions, including connecting peripherals, switches and indicators.

Sections include:

- ◆ ADAM-6501 Peripherals
- ◆ RS-232/485 Interfaces Assignment
- ◆ LAN: Ethernet Connector
- ◆ Power Connector
- ◆ LED Indicators

2.1 ADAM-6501 Peripherals

The following figures show the connectors on ADAM-6501. The following sections give you detail information about function of each peripheral.



Figure 2-1: ADAM-6501 front view

2.2 COM1 & COM2: RS-232/485 Interfaces

The ADAM-6501 offers two serial communication interface ports. COM 1 is RS-232 ports and COM 2 is RS-485 ports, and Table 2-1 lists the setting of serial ports.

Table 2-1: Serial ports default setting

COM Port	Default Setting
COM1	RS-232 (Full RS-232 with RJ-48 connector)
COM2	RS-485

Automatic Data Flow Control Function for RS-485

In RS-485 mode, ADAM-6501 automatically senses the direction of incoming data and switches its transmission direction accordingly. Therefore no handshaking signal (e.g. RTS signal) is necessary. This feature lets you simply and quickly build an RS-485 network with just two wires. More importantly, application software previously written for half duplex RS-232 environments can be maintained without need for modification.

2.3 LAN: Ethernet Connector

The ADAM-6501 is equipped with 10/100 Based-T Ethernet port. The Ethernet port provides a standard RJ-45 jack on board, and LED indicators on the front side to show its Link (Yellow LED) and Active (Green LED) status.

2.4 Power Connector

The ADAM-6501 comes with a Phoenix connector that carries 10~30VDC external power input. The recommended power input is 24VDC.

2.5 LED Indicators

There are one power LEDs on the ADAM-6501 front panel for indicating system status:

ON : Power ON

Off : Power OFF

Chapter 3 Initial Setup

This chapter shows how to initial the ADAM-6501, sections include:

- ◆ Initial Procedure
- ◆ Configure ADAM-6501

3.1 Initial Procedure

The ADAM-6501 offers an easy setup feature: It takes four easy steps for your initial setup before use. Take out the ADAM-6501 from the package and follow the steps below for initial setup:

Step 1: Connect all peripheral devices, such as RJ-45 connector of Ethernet connection, RS-232 (RJ-48 connector) and RS-485 connectors.

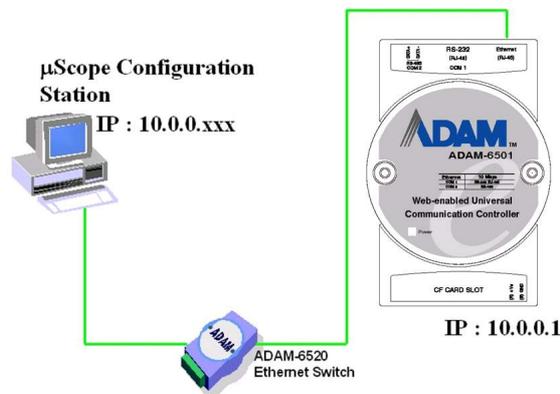
Step 2: Connect the power cord to the ADAM-6501 and plug the other end of the cord into the power outlet, and then ADAM-6501 boots up immediately.

Step 3: The ADAM-6501 default IP is set as 10.0.0.1. Please set the IP of your host computer to be static IP : 10.0.0.XXX for connection with ADAM-6501.

Step 4: Using the uScope tool to re-configure the IP of ADAM-6501 to meet your network configuration. The path of uScope Remote Display Tool in ADAM-6501 CD is “uScope Remote Display Tool\uScope.EXE “.

3.2 Configure ADAM-6501 : uScope Remote Display Tool

This tool works only with Ethernet connection. it's requires both of your computer and the ADAM-6501 has same Subnet Mask. The default IP address for ADAM-6501 is : 10.0.0.1 and the default Subnet mask is: 255.255.255.0. So you can set your computer IP address to 10.0.0.2 and set the Subnet mask to 255.255.255.0.



*actually you can set any IP address that other than 10.0.0.1 from 10.0.0.1 to 10.0.0.255 . If you connected you computer and ADAM-6501 to a router, don't set your computer IP address the same as the Router's.

Connect ADAM-6501 with your computer by using a cross-over Ethernet cable. Or connect both ADAM-6501 and your computer into a hub.

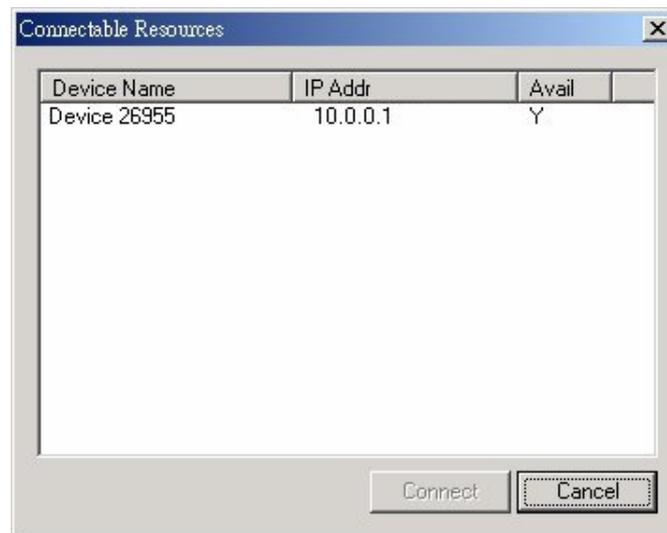
After ADAM-6501 boot up, it will broadcast it's IP to the network. uScope Remote Display tool running on you computer will detect the UDP message that send out by ADAM-6501 and show the device name and IP in it's

device list. You can select and connect to the device (ADAM-6501) in the list as you want.

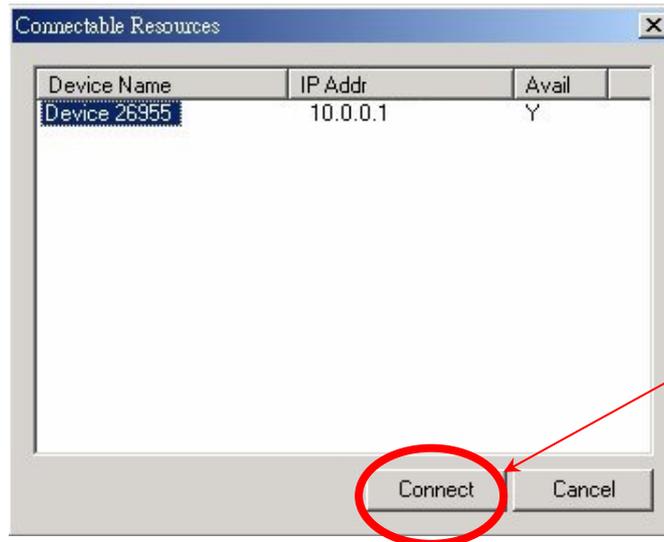
Double Click the uScope icon in configuration computer:



Click the "Show List" button :

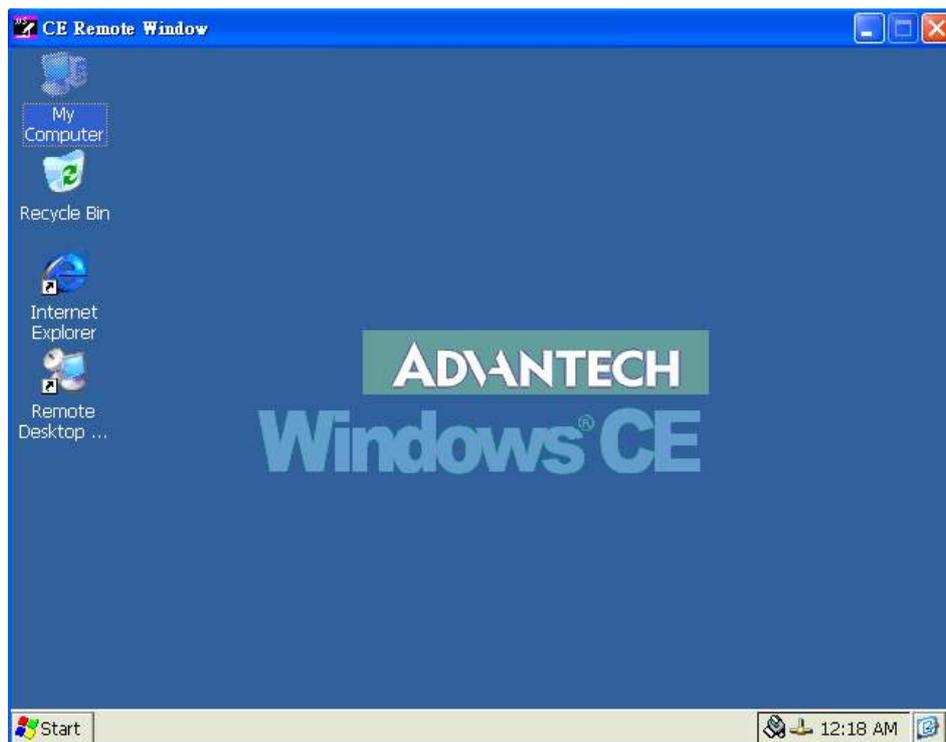


Choose the connected device in the list :

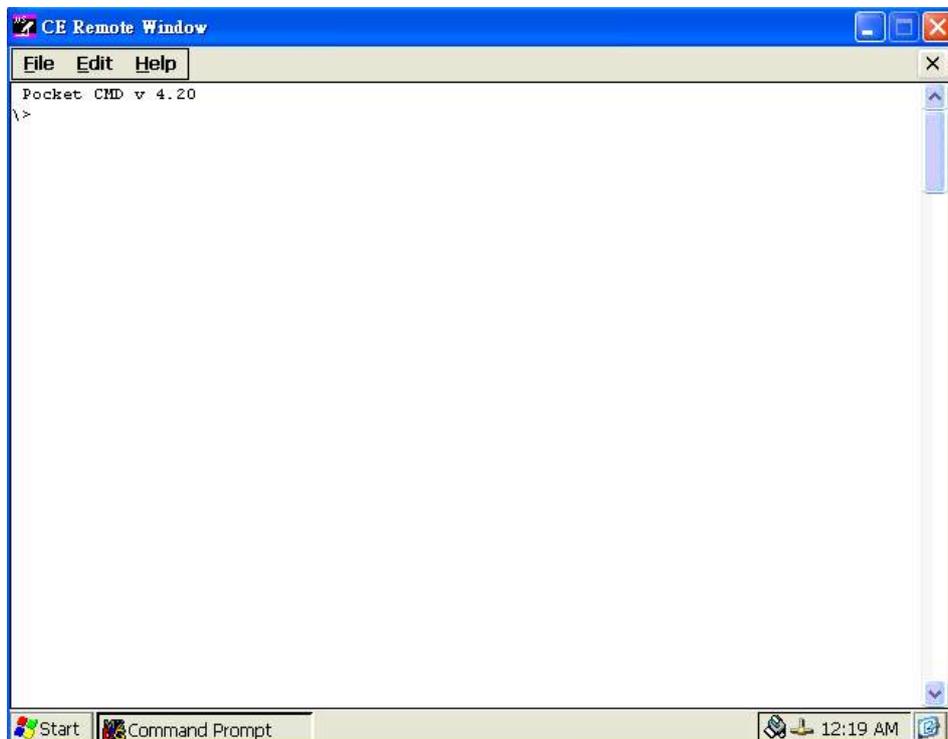
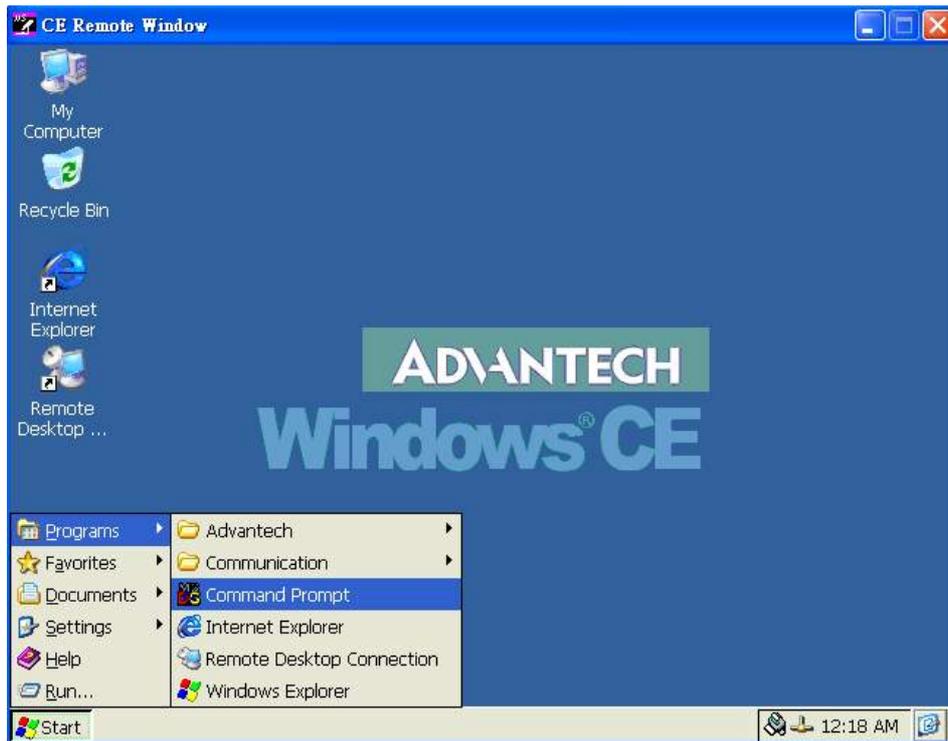


Click
"Connect"

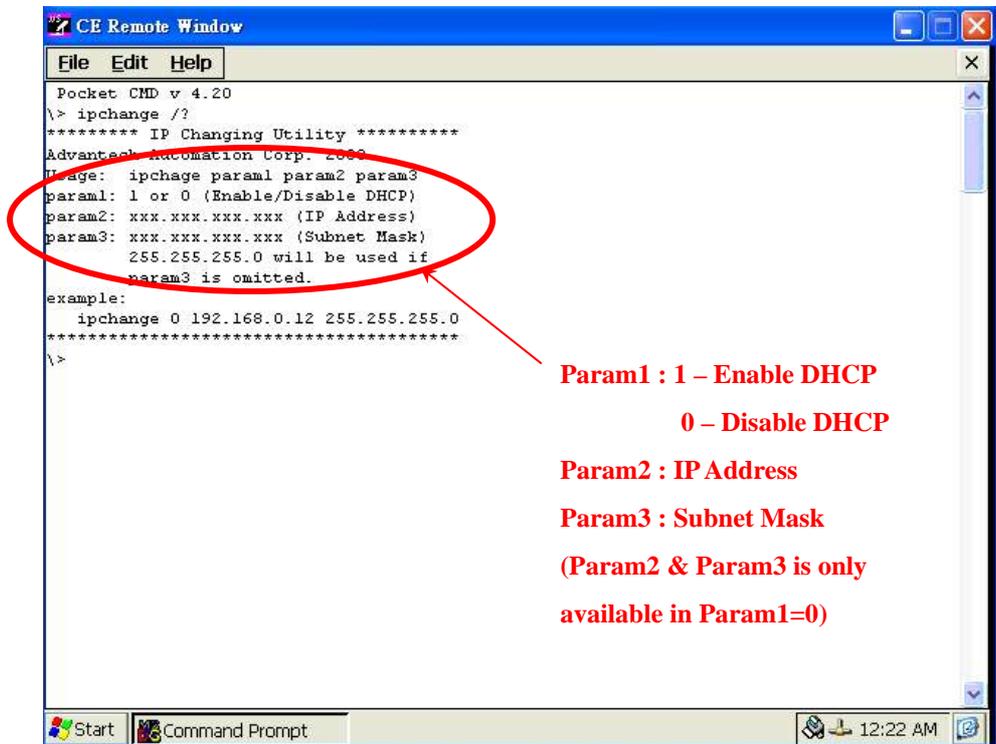
After clicking "Connect" bottom, the configuration computer will connect with ADAM-6501. The remote display screen will be as following :



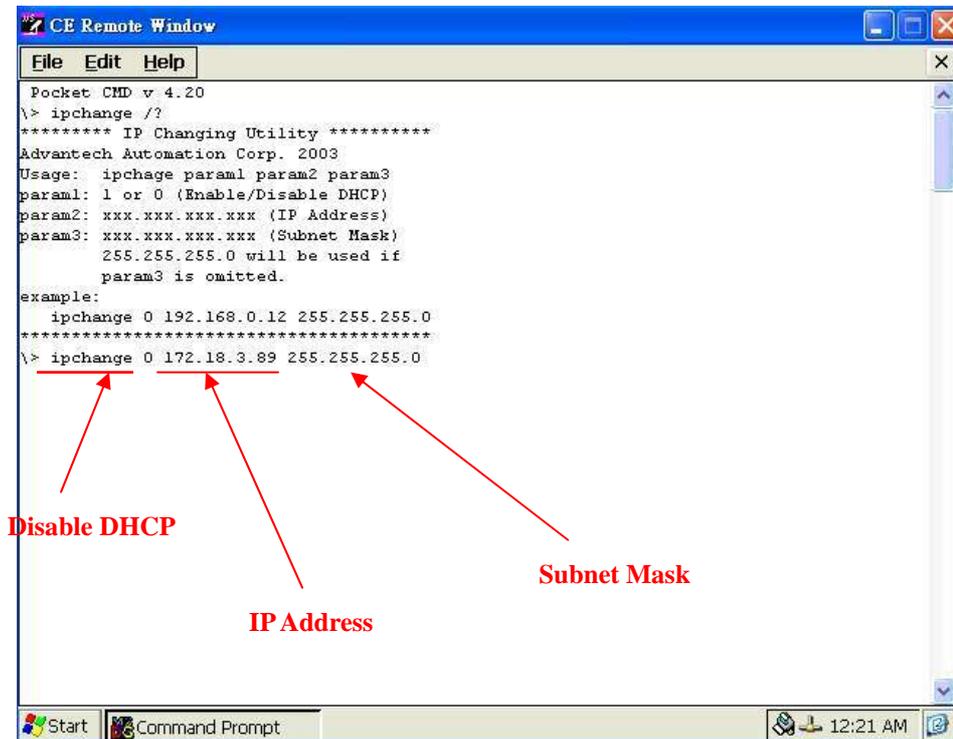
Please go to the "Command Prompt" for network IP setting :



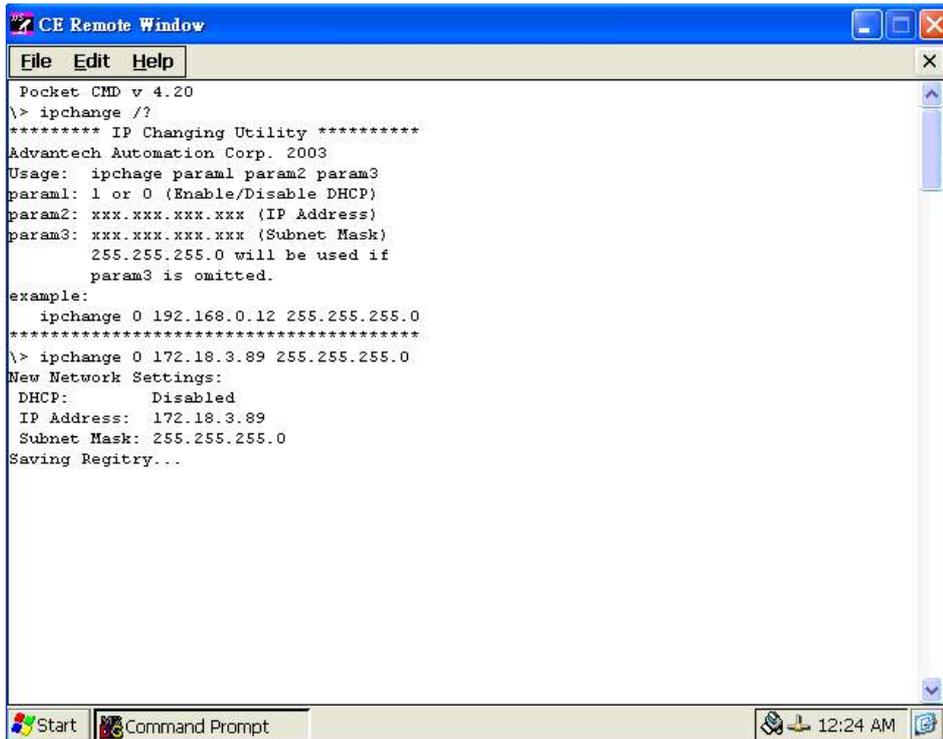
User can use "ipchange" command for IP change setting in command prompt mode. Please type "ipchange /?" for command reference.



If the DHCP is choose, the "ipchange 1" will be used as set up command. If this ADAM-6501 will be set as the specific IP address, the setting command and procedure should be as following :



Press "Enter", the remote display screen will show the following message.



Wait for the "Saving Registry Done" to make sure the IP change setting work is successfully done.

Re-power on the ADAM-6501 module to re-boot the WinCE for new IP address implement.

Note : The uScope Remote Display tool is only used for the configuration work. It wasn't design to run a long time to be used as the remote monitoring tool.

Chapter 4 : Advanced Application

- ◆ Insert CompactFlash™ Card
- ◆ ActiveSync Connection
- ◆ Remote Access Service Configuration
- ◆ Autorun Configuration
- ◆ Application Development Procedure
- ◆ Save Your Setting

4.1 Insert CompactFlash™ Card

The procedure for installing a CompactFlash™ card into the ADAM-6501 is as follows, and please follows these steps carefully.

Step 1: Remove the power connector to power off the ADAM-6501

Step 2 : Remove the CF slot cover.

Step 3: Plug a CompactFlash™ card with user's OS and application program into a CompactFlash™ card slot on board.

Step 4: Plug in the CD slot cover for protecting the CF card.

Step 5: Connector the power connector to re-power on the ADAM-6501

Note : How to update the WinCE.NET 4.2 Image for ADAM-6501?

Please follow the above steps to plug in the CF card with image (the image file is put in the path:\Image of ADAM-6501 CD. please copy the image file from CD to CF card and please be noticed the format of the CF card must be FAT16) then wait for 5 minutes for rebooting the ADAM-6501 with new image.

4.2 ActiveSync connection between computer and ADAM-6501

- Using a null-modem cable connect ADAM-6501 COM1 with one of COM port on your computer
- Install Microsoft ActiveSync software on your computer and make the serial port you want connect with ADAM-6501 available for ActiveSync (see ActiveSync help for details).

Note: ADAM-6501 will use 115200 as it default BaudRate to do the ActiveSync connection. If ActiveSync program running on your computer never accept a connection at this BaudRate before, probably you'll get timeout. Since it need scan from low BaudRate to the high BaudRate , if that takes too long, ADAM-6501 will stop trying connect to your computer. So, you'd better use another CE device which has a display to connect to you Desktop through ActiveSync at 19200 BaudRate first. Thus ActieSync on your desktop PC will remember this Baud Rate, and next time when ADAM-6501 try to connect to it at this Baud Rate, it'll be connected easily.

ActiveSync Connection

The tool is used for the application program on-line programming/debug requirement. User has to install the Microsoft ActiveSync program in configuration computer first. For the detail operating procedure of ActiveSync, please follow the steps by steps operating guide.

Step 1 : Setup the ActiveSync in configuration computer

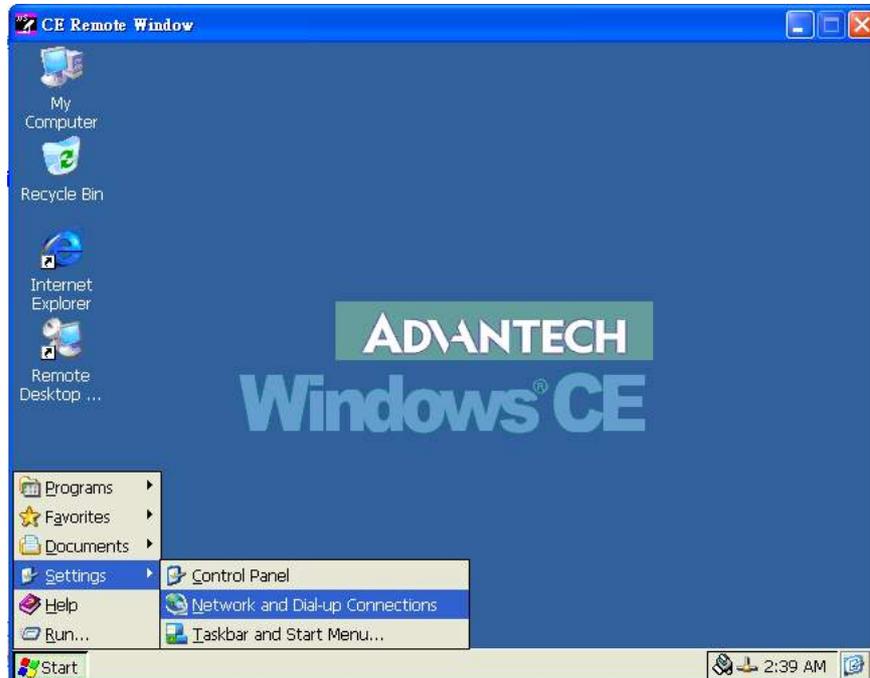
1. Insert ADAM-6501 CD into the CD-ROM in the configuration computer.
2. Install ADAM-6501 Software Development Kit for eVC++ from below path: \Windows CE .NET V4.2\SDK\ADAM6501_SDK.msi
3. Install Microsoft ActiveSync 3.6 from below path: \Windows CE.NET V4.2\Utility\Microsoft ActiveSync 3.6.exe

4. Please connect the ActiveSync cable (Null Modem cable, Advantech part no. : **1703093000**) to COM1 of ADAM-6501 and the COM port of configuration computer for ActiveSync communication.

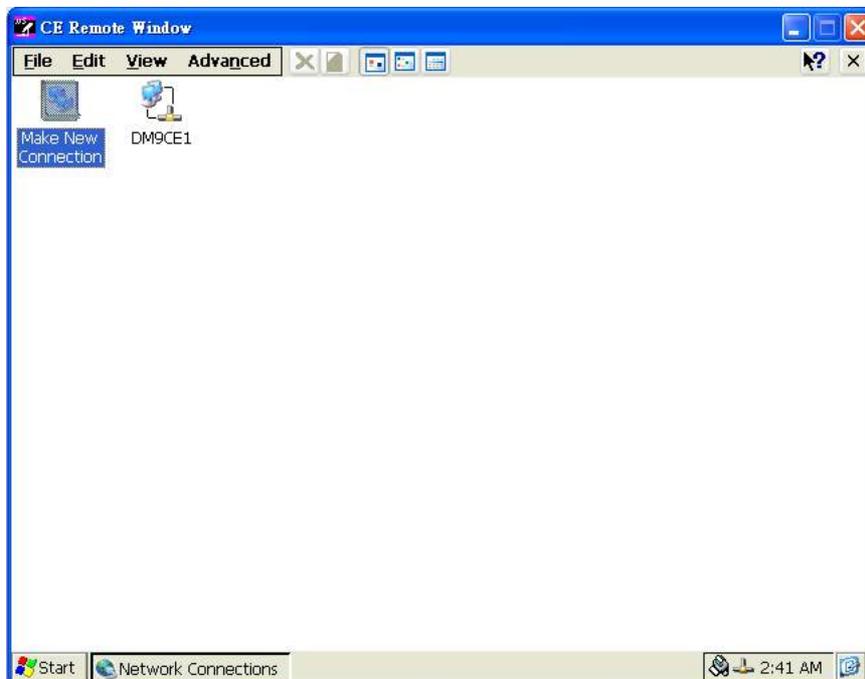
Step 2 : Please connect the ADAM-6501 via uScope through Ethernet first.

Step 3 : Configure the COM1 of ADAM-6501

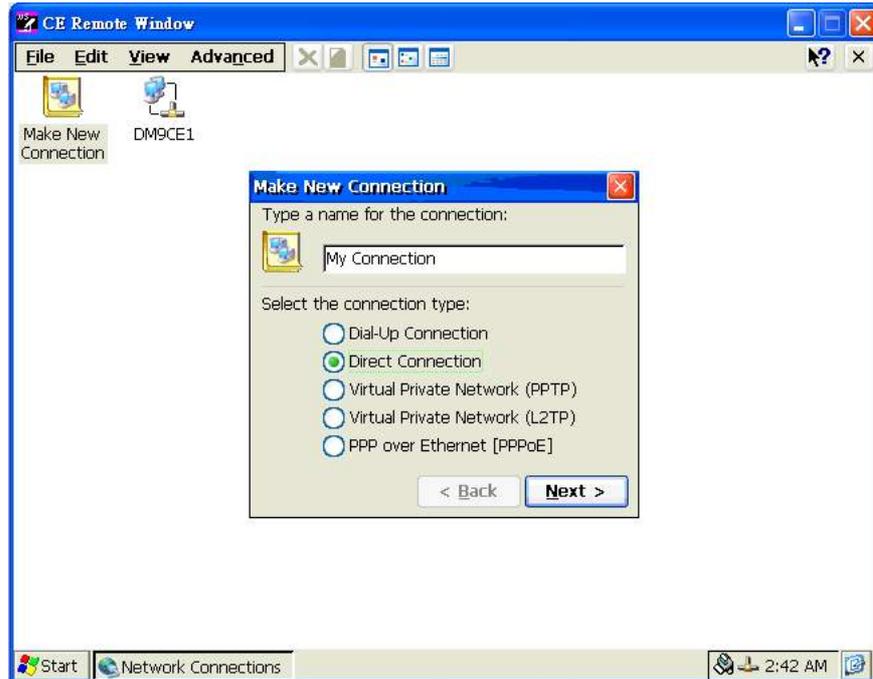
Press Start of task bar of window system and select **“Setting”** → **“Network and Dial-up connections”**.



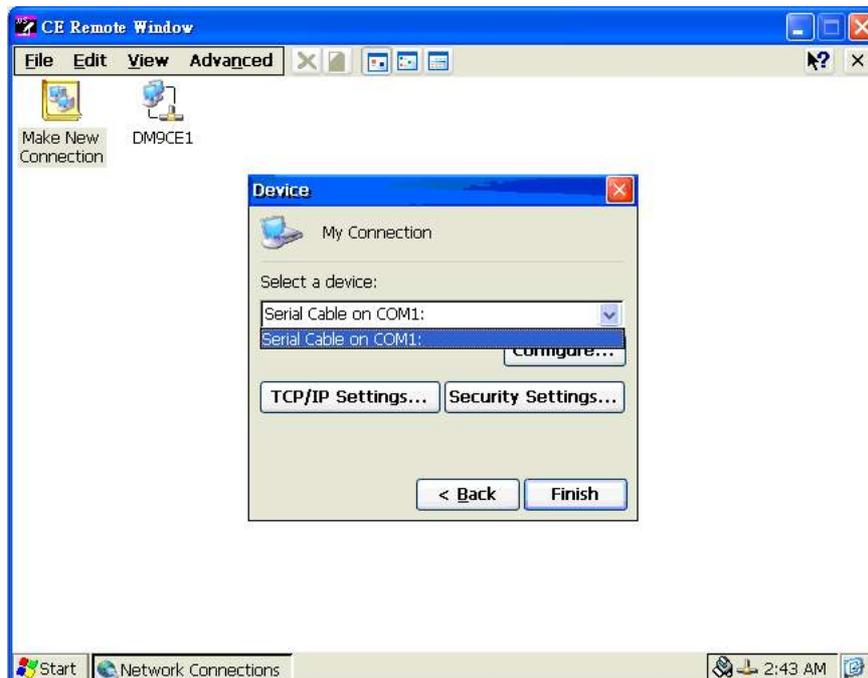
- A. Click the icon **“Make New Connection”** to make a new connection.



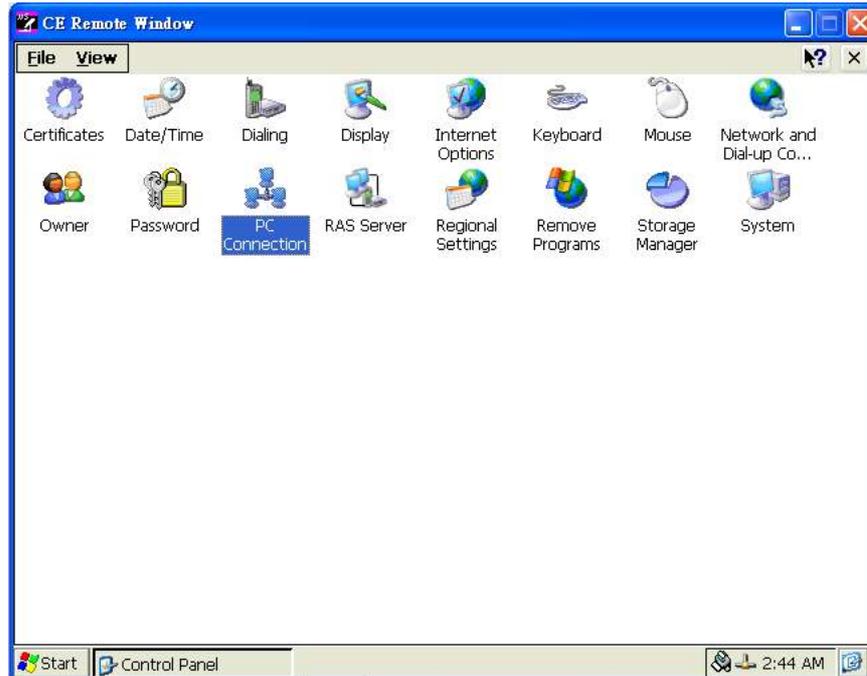
Select the connection type: **Direct Connection**, then press **Next** button.



B. Choose the COM port of ADAM-6501. In ADAM-6501, there is only COM1 supporting RS-232 for selection.

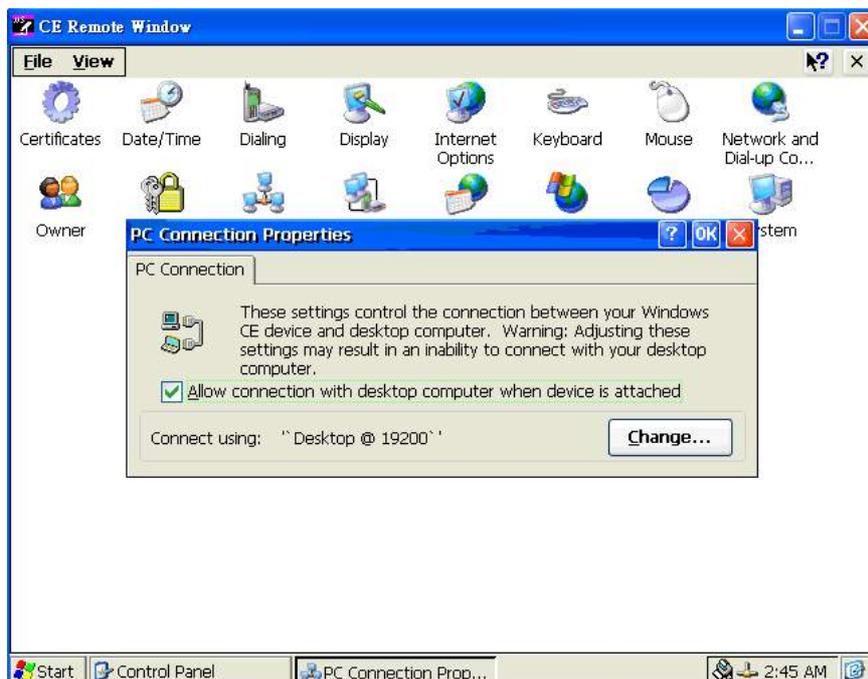


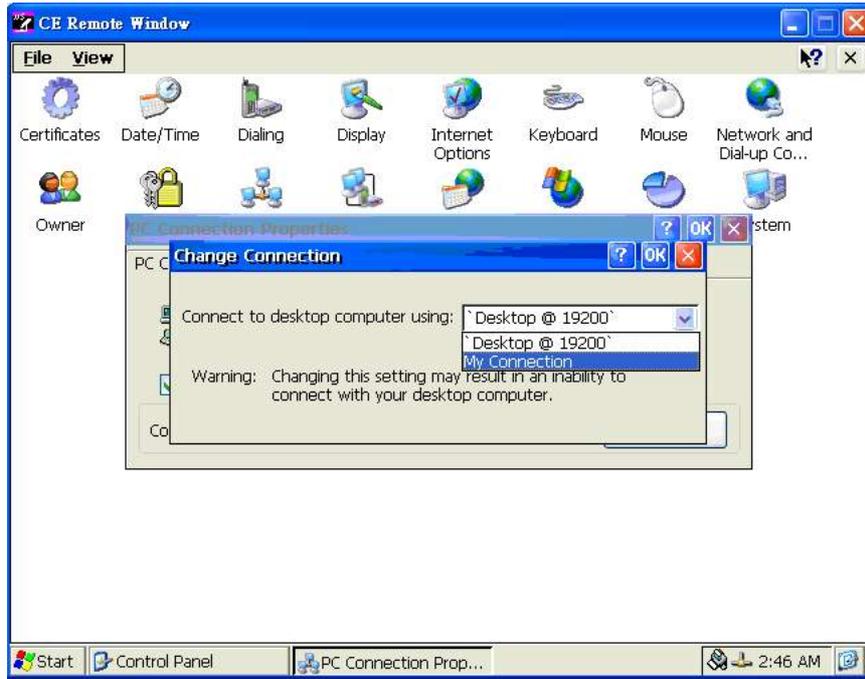
C. Press **Start** → **Setting** → **Control Panel**, and then click “**PC Communication**” icon.



D. Click **Change** button to choose your network communication.

In this example, change the network communication to “**My Connection**”.



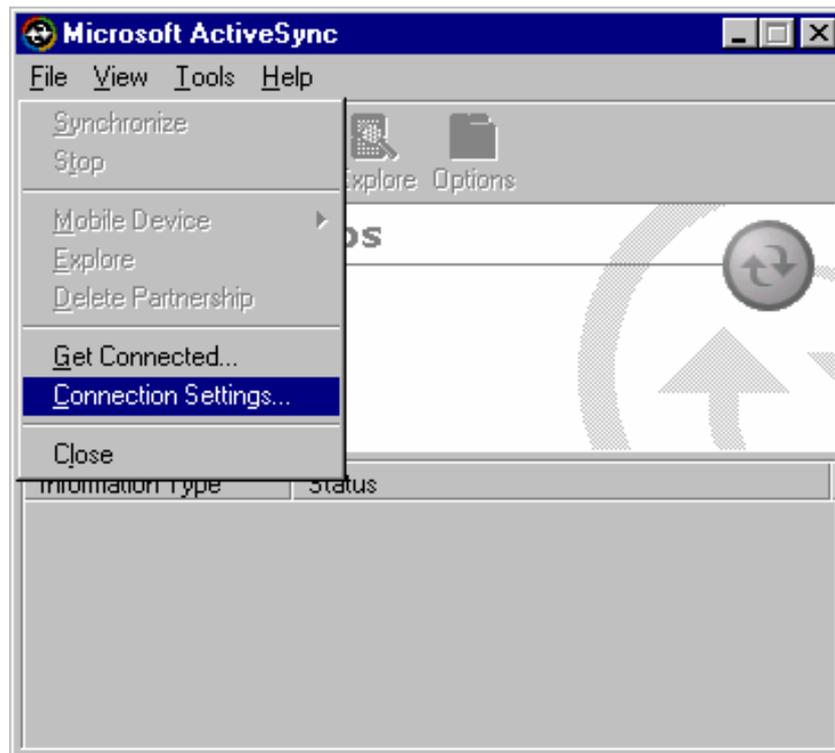


Step 4 : Setting the communication environment of the host

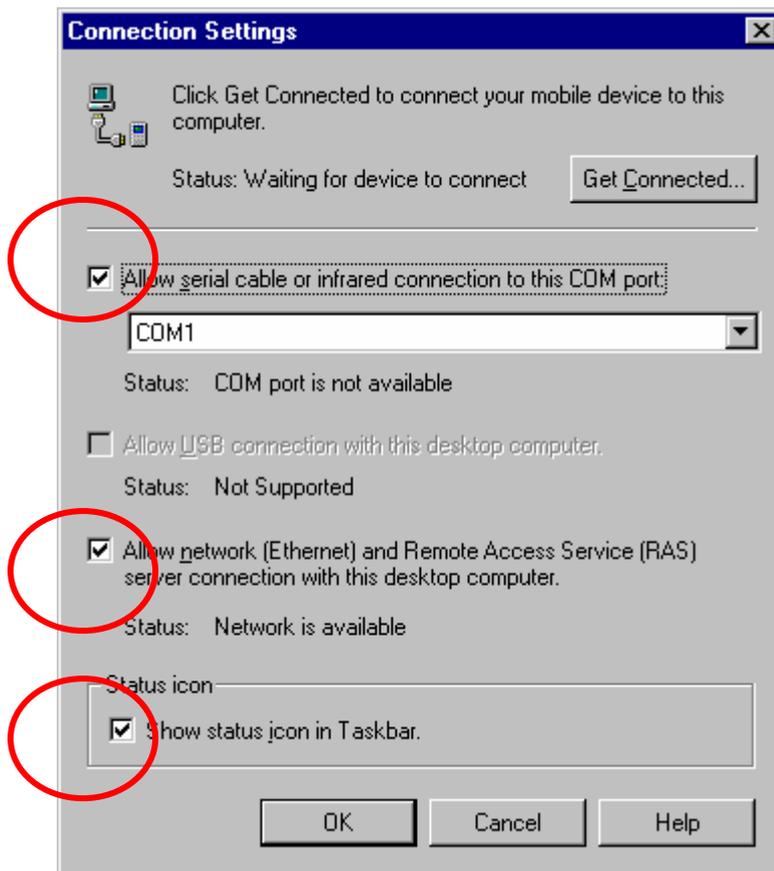
A. Double click the icon **ActiveSync**.



B. Select **File**→**Connection Settings**



C. Configure the connection settings as below.

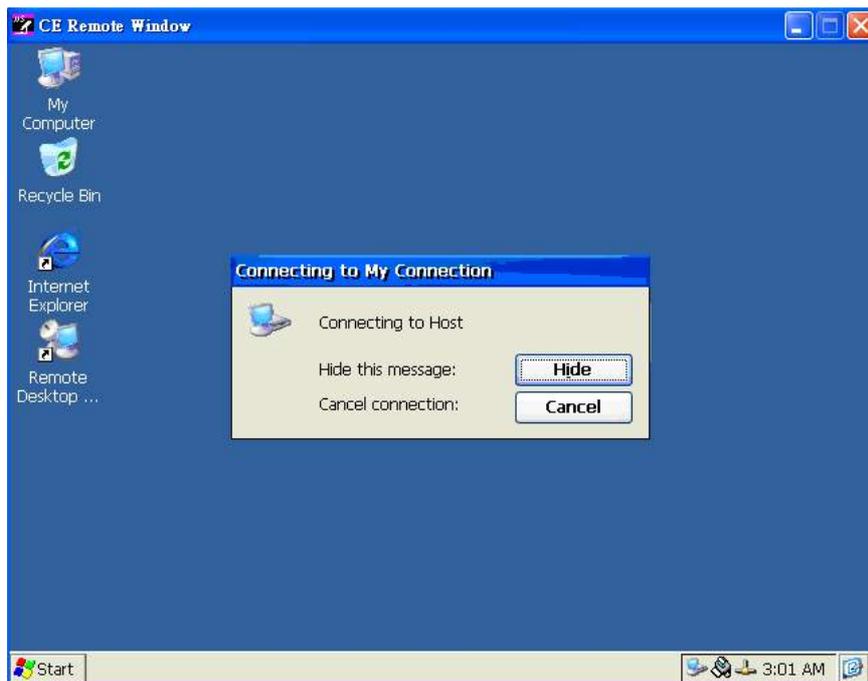
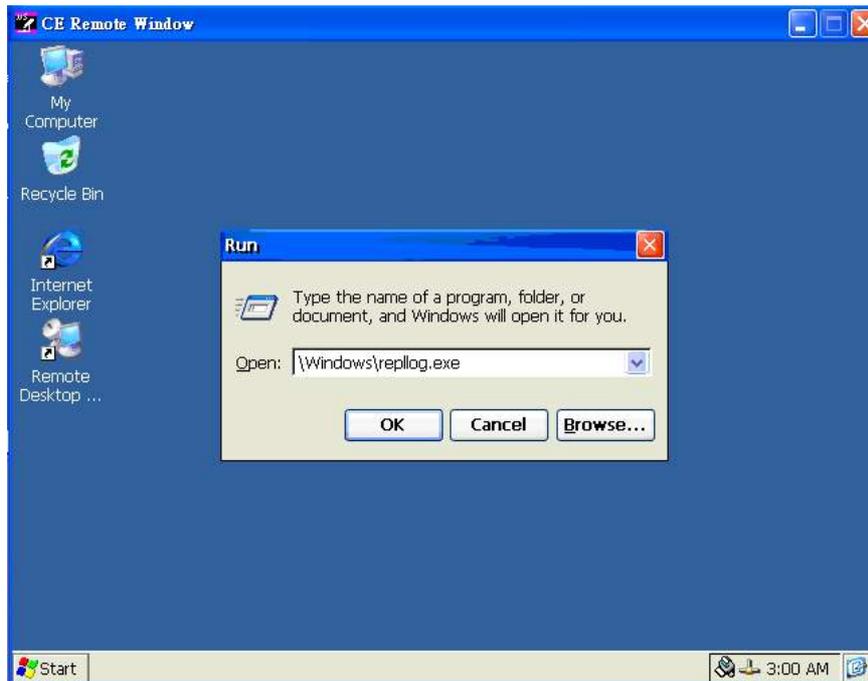


D. After you configure the connection setting, it will show the below dialog window when you press **Get Connected**

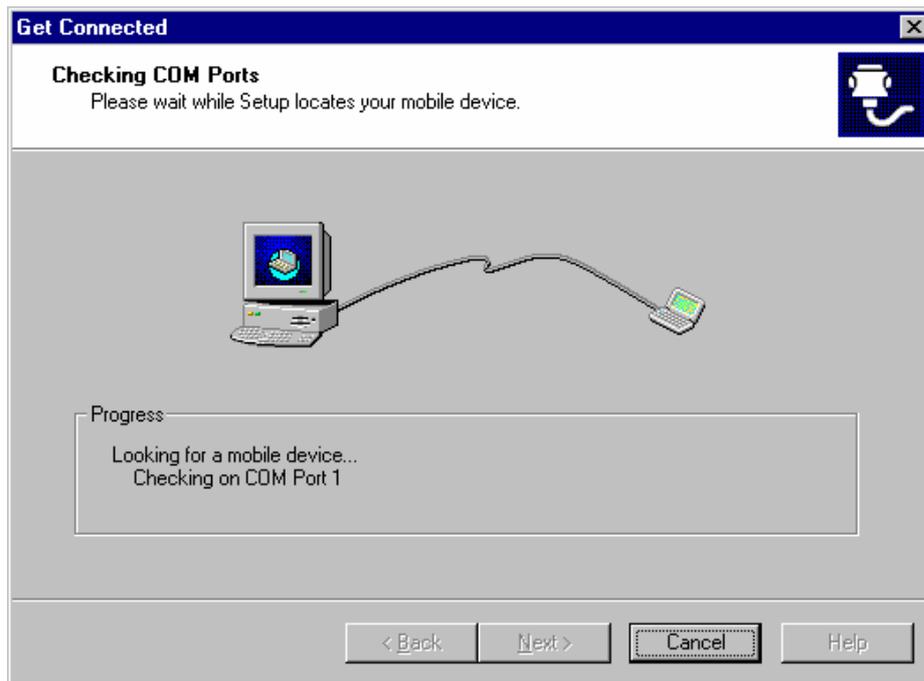


NOTE: Don't click **Next button at this time.**

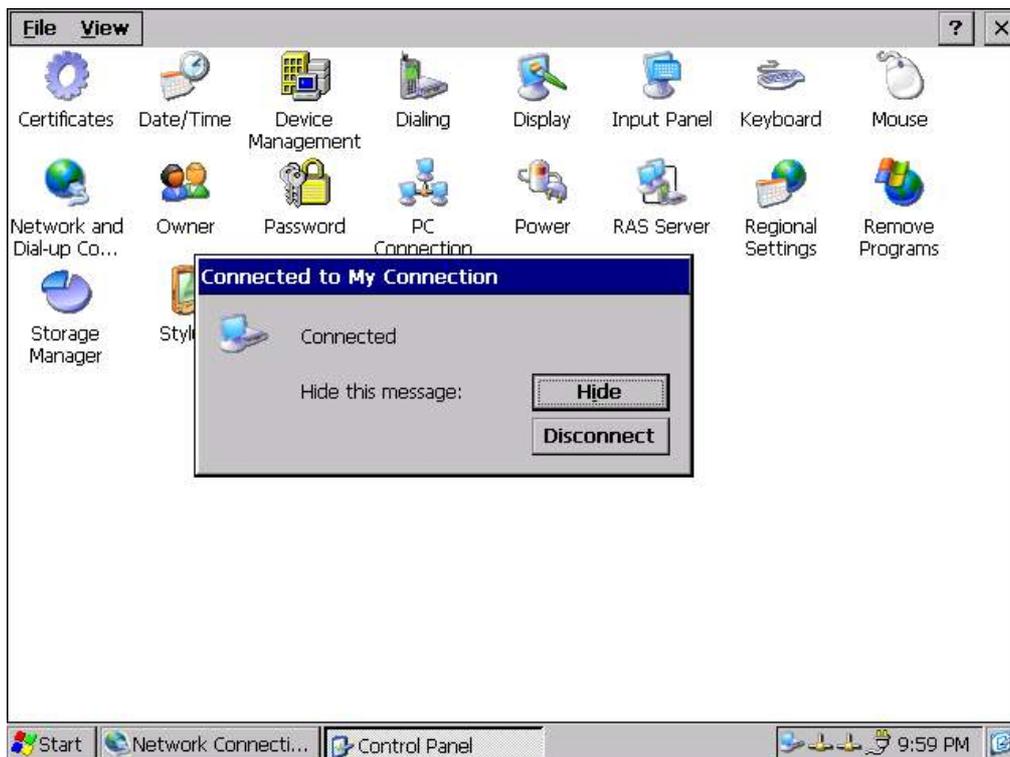
- E. Press **Start** → **Run** of ADAM-6501; enter the **windows\repllog.exe** in the command line of and press **OK** button.



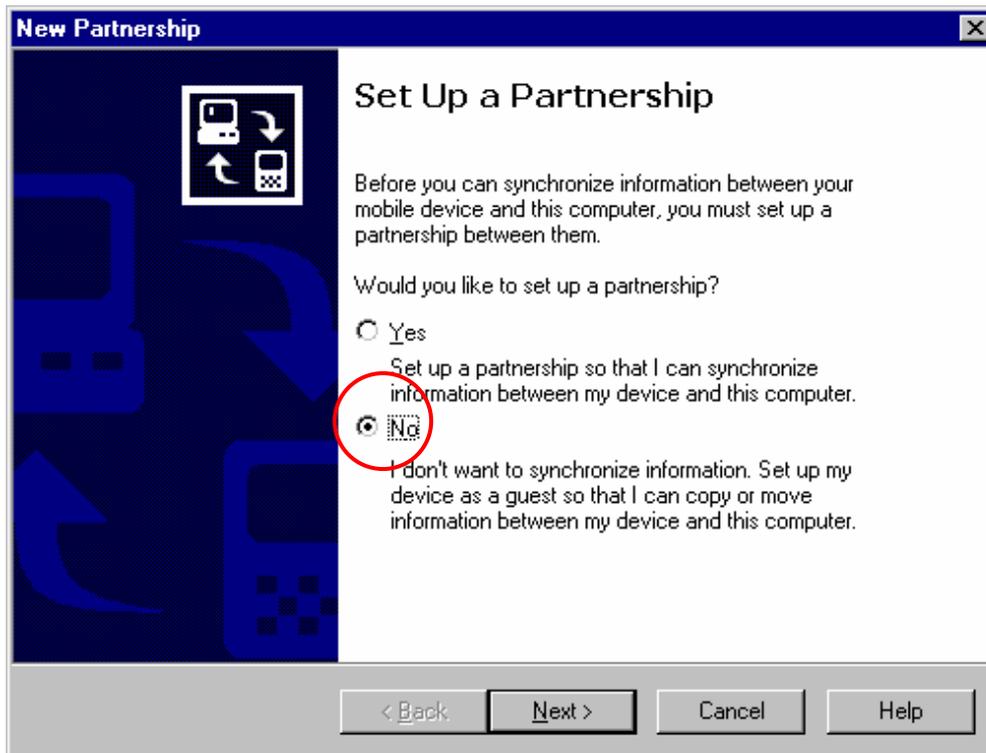
- F. Now, press the **Next** button in the “**Get Connected**” dialog in the host. It will build the connection between ADAM-6501 and host.



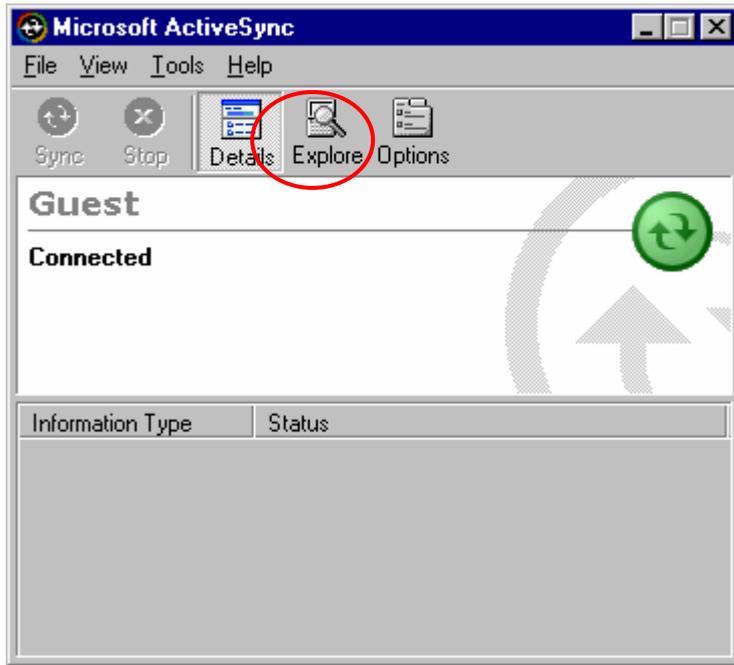
- G. If the connection between ADAM-6501 and the host, you will see below message in ADAM-6501.



- H. If the connection between ADAM-6501 and the host, you will see below message in the host.
Select **No**, then press **Next** button.
- I.



After the New partnership setting, it will show the below dialog window in the host.

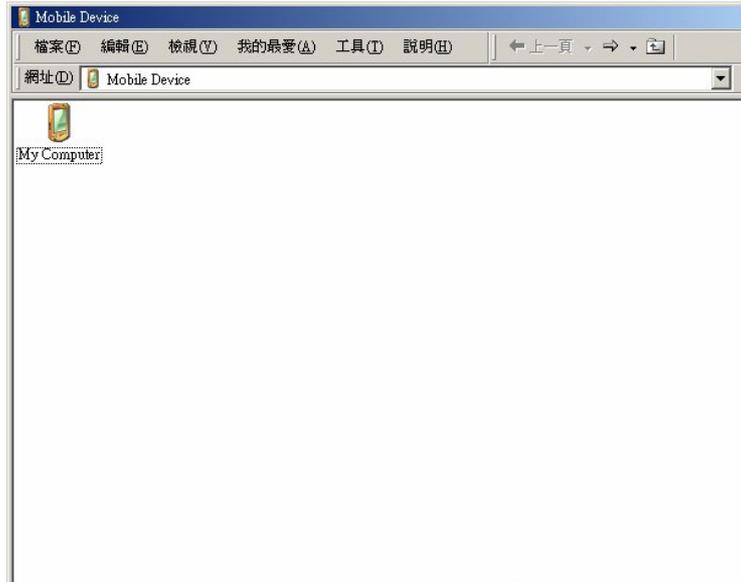


- J. Press **Explore** button in Microsoft ActiveSync window, it will pop up the **Mobile Device** window to display **the file resources and information of ADAM-6501** as below:

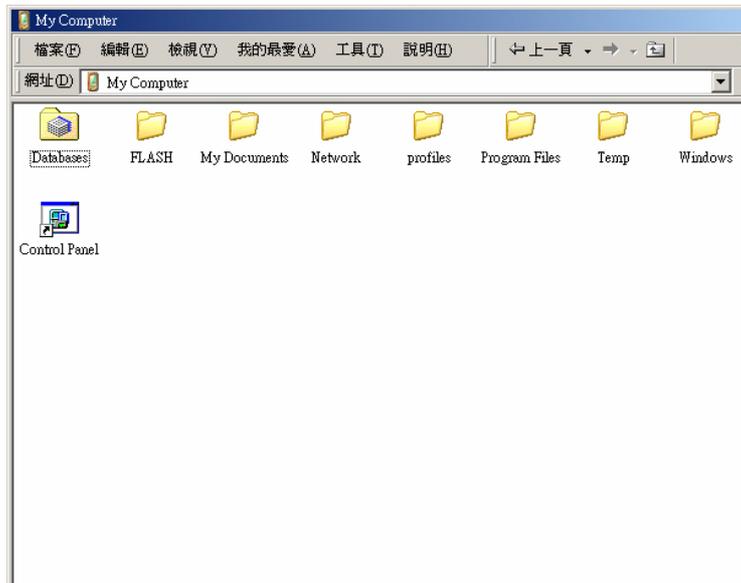
For example, if you click the icon **“My Documents”**, you will see the content of storage in ADAM-6501.



Step 8 : User can begin to transfer the file from configuration computer to connected ADAM-6501.



Double click "My Computer" in "Mobile Device" for file translation.



4.3 Remote Access Server Configuration

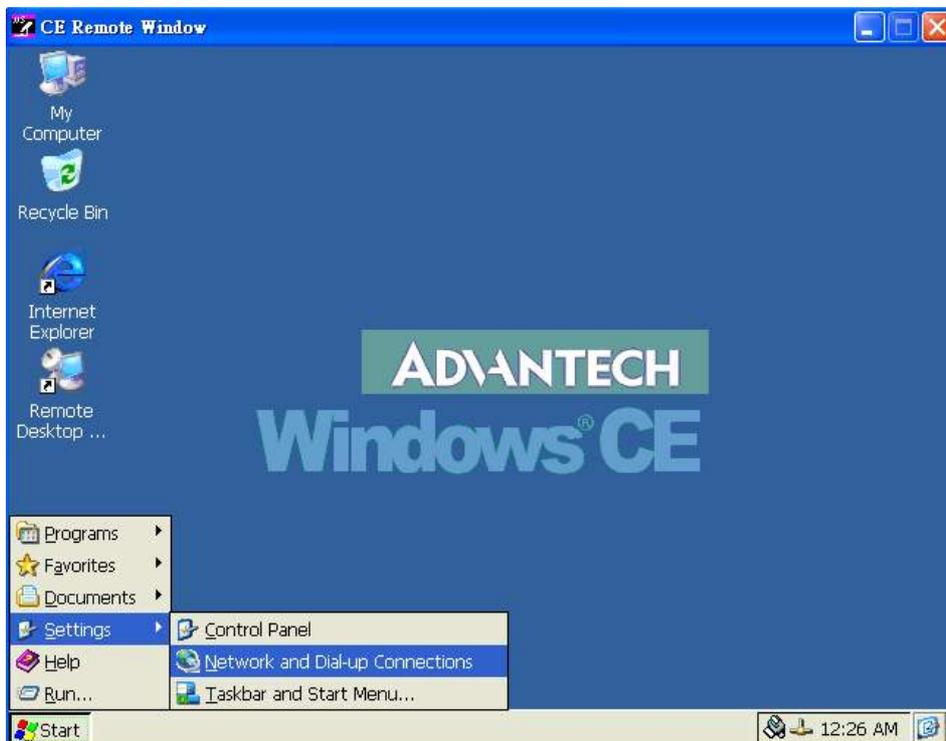
Introduction

ADAM-6501 provides “Remote Access Services” which offers the possibilities for remote network and user to have TCP/IP access local mail servers, access to database, web servers or other Intranet services.

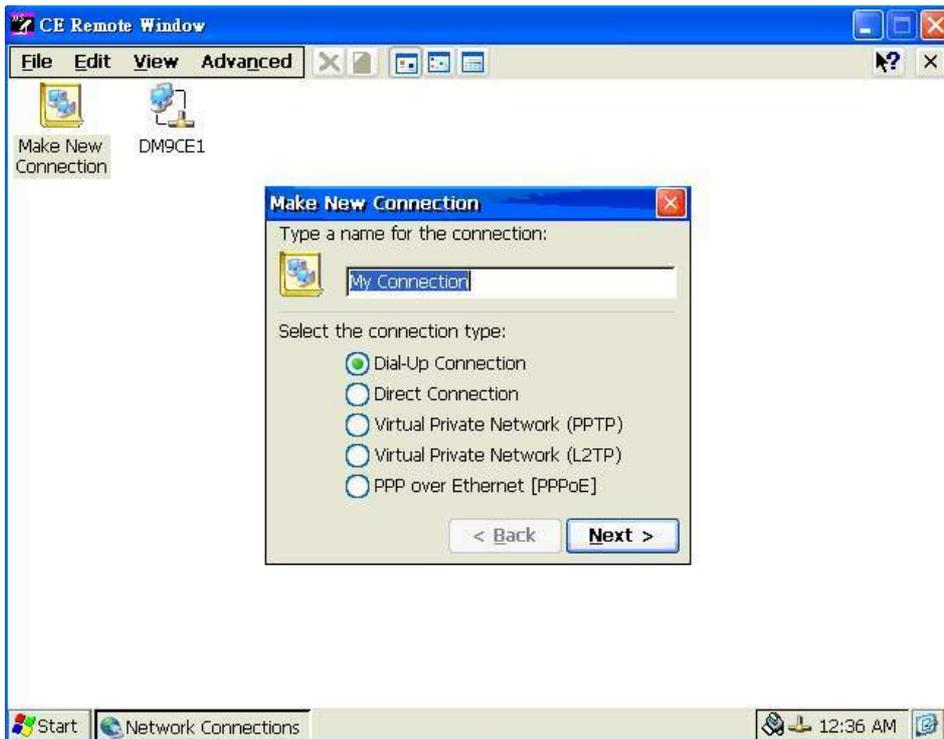
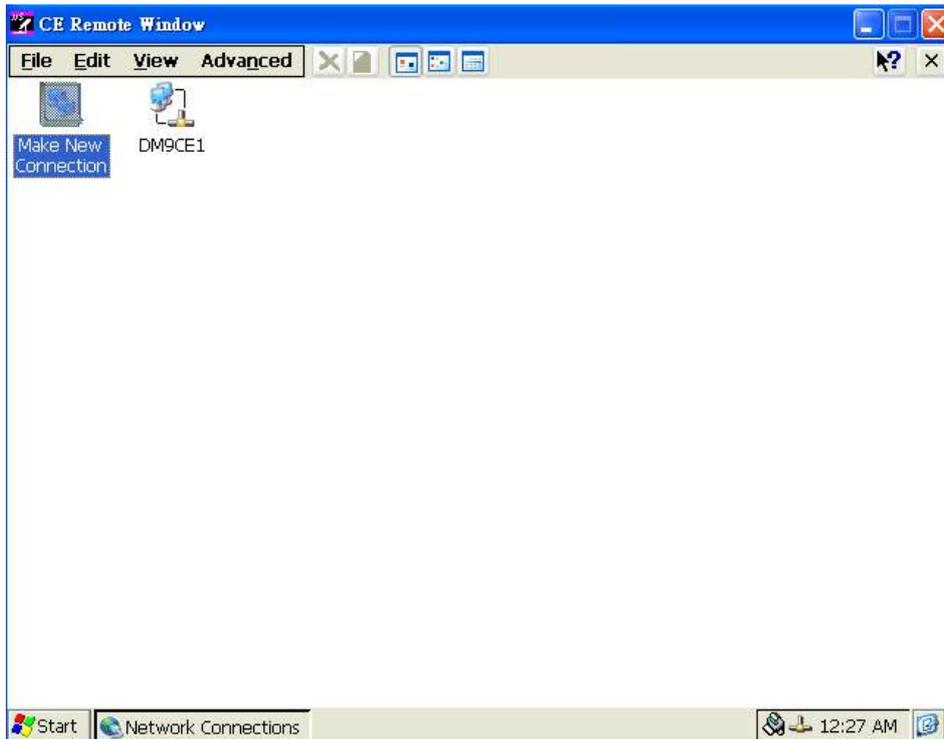
The following description introduces how to set the dial-up and dial-in configuration.

Dial-up configuration

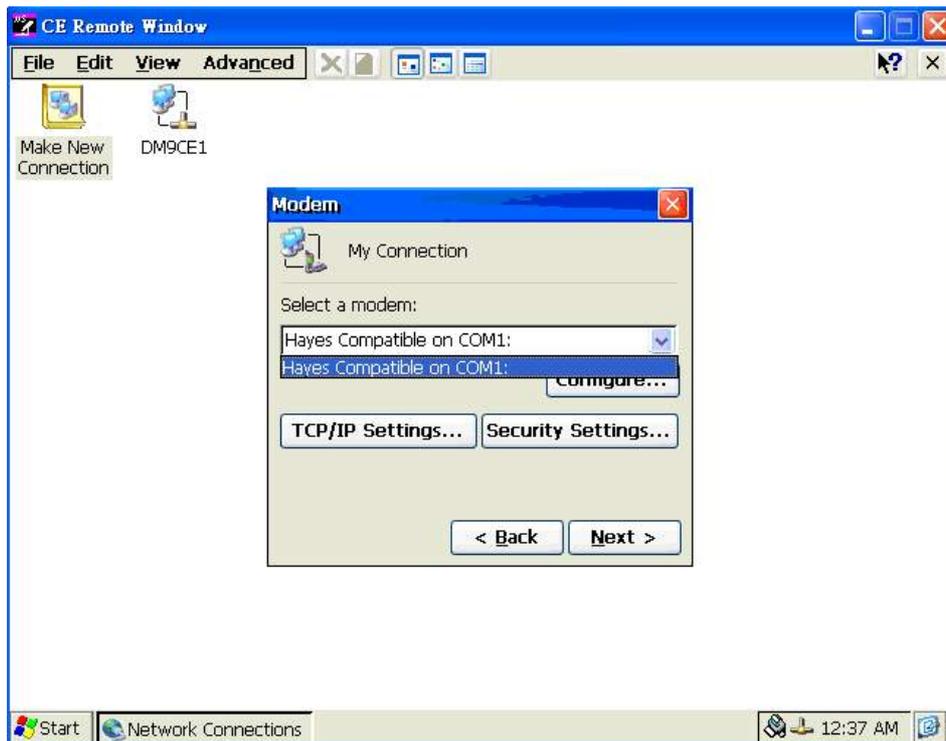
Step 1 : Press start of task bar of window system and select “Setting” → “Networking and Dial-up connections”.



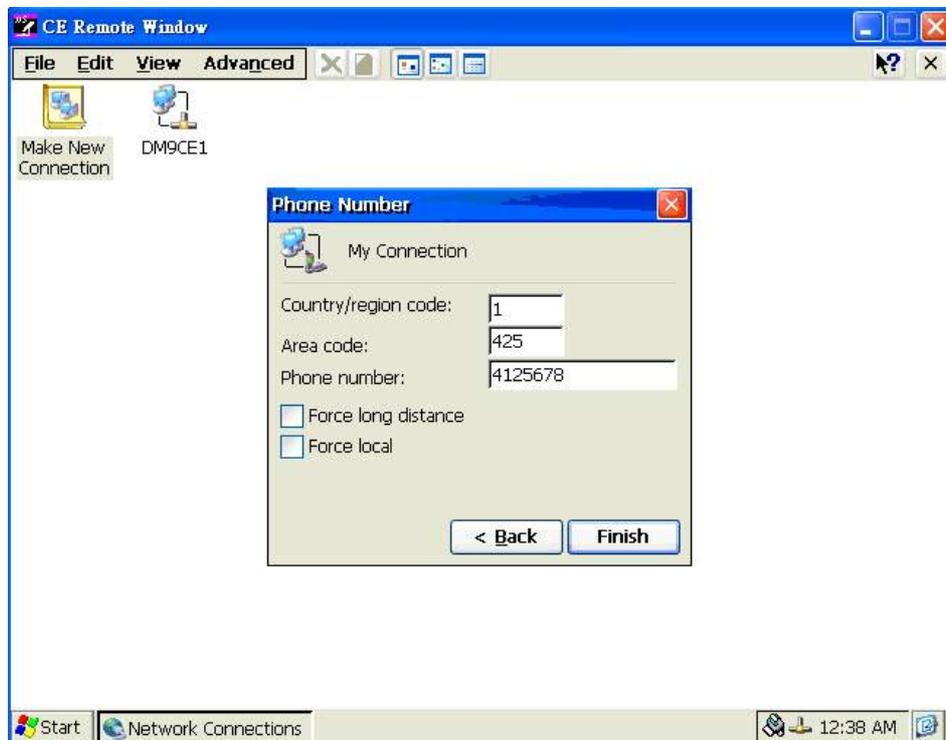
Step 2 : Double click “Make New Connection”, then a dialog window will pop out. Select Dial-Up Connection and press **Next >**.



Step 3 : Setup the device according to the specification of the modem and press **Next >.**

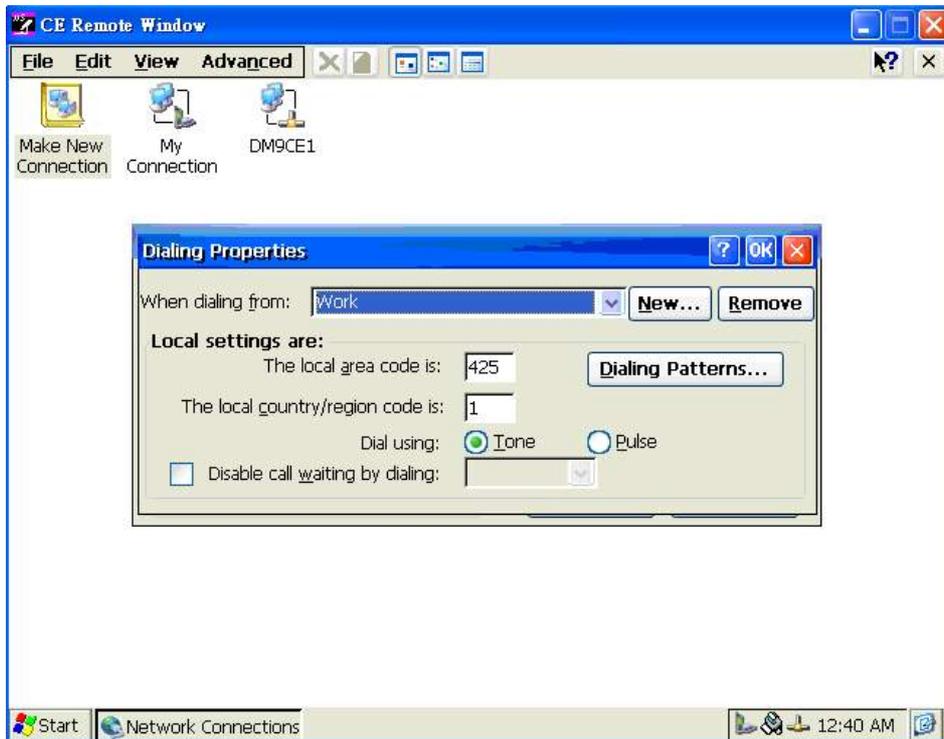
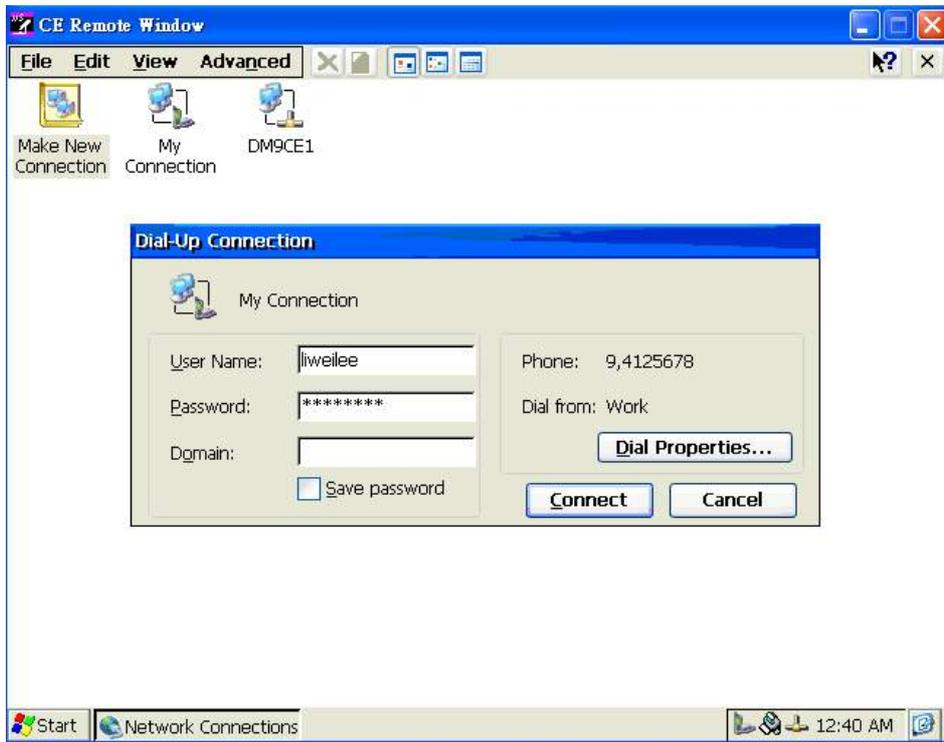


Enter the telephone number in the "Phone Number" window. Press **Finish** button to complete the dial-up configuration.



Step 4 : Press start of task bar of window system and select "Setting" → "Networking and Dial-up connections". Double click the new connection that you made previously (it is RAS Connection in this

case), and it will pop out the “Dial-Up Connection” dialog window. Enter your user name / password, then press **Dial Properties**.

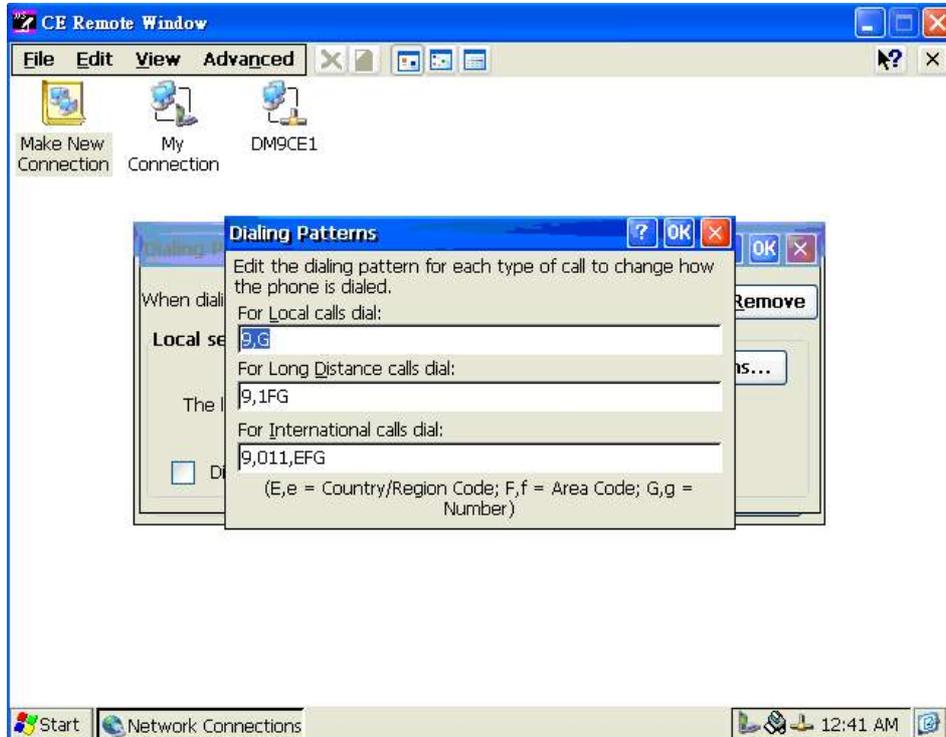


Step 5 : Press **Dialing Patterns** button in the Dialing Properties window. Edit the dialing pattern for each type of call to change how the phone is dialed.

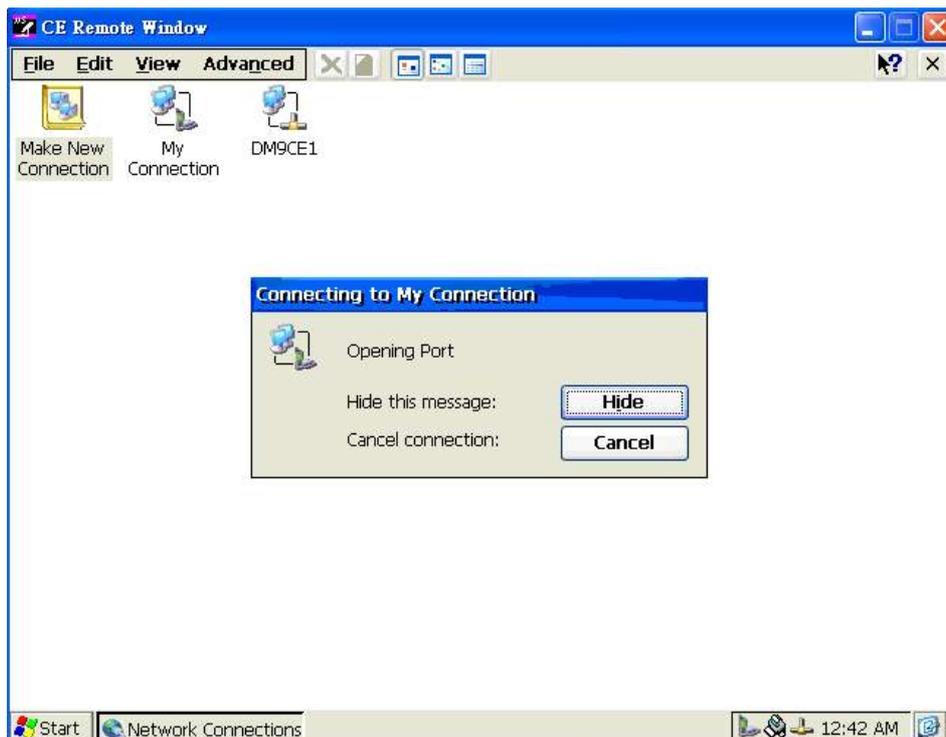
NOTE: Country/Region Code, please enter “E” or “e”.

Area Code, please enter “F” or “f”.

Number, please enter “G” or “g”.

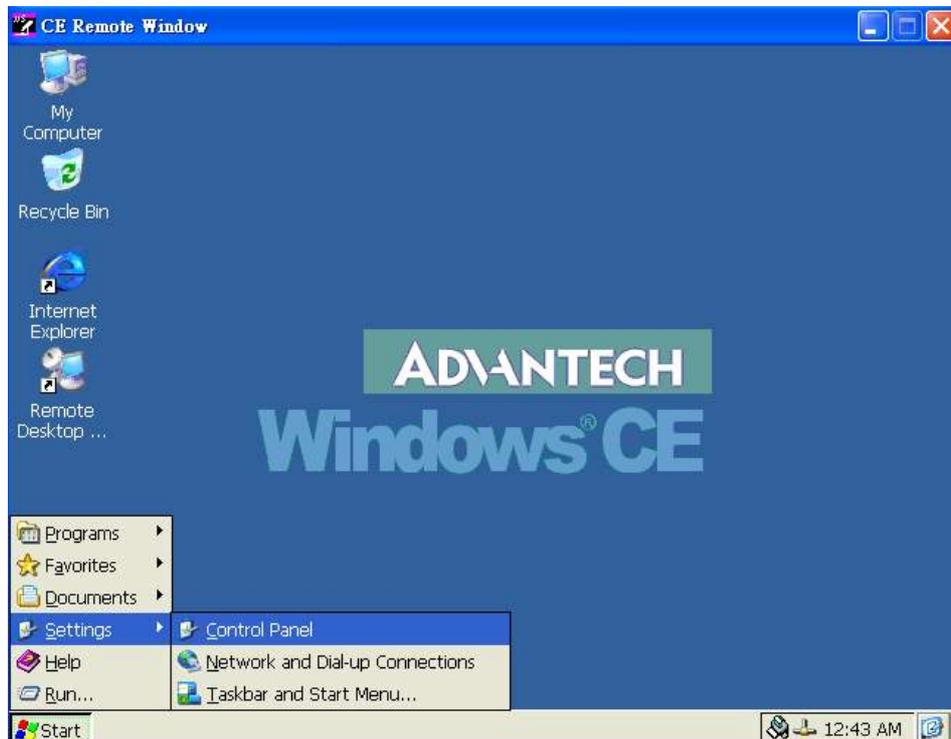


Step 6 : Double click My Connection 2 and press **Connection** button to build a PPP connection.

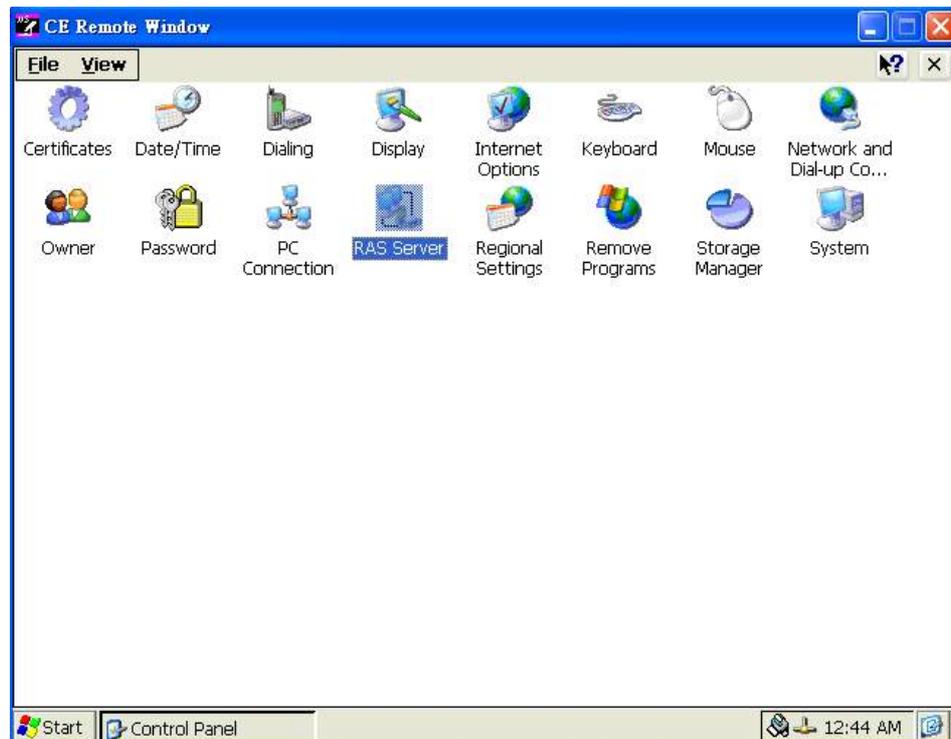


Dial-in Configuration

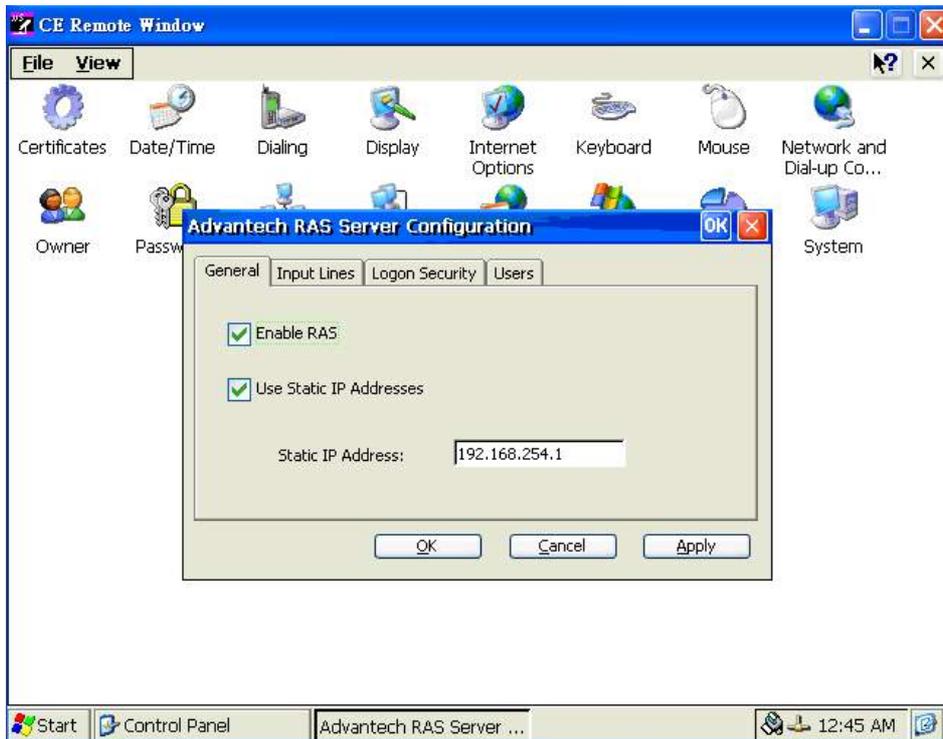
Step 1 : Press start of task bar of window system and select “Setting” → “Control Panel”.



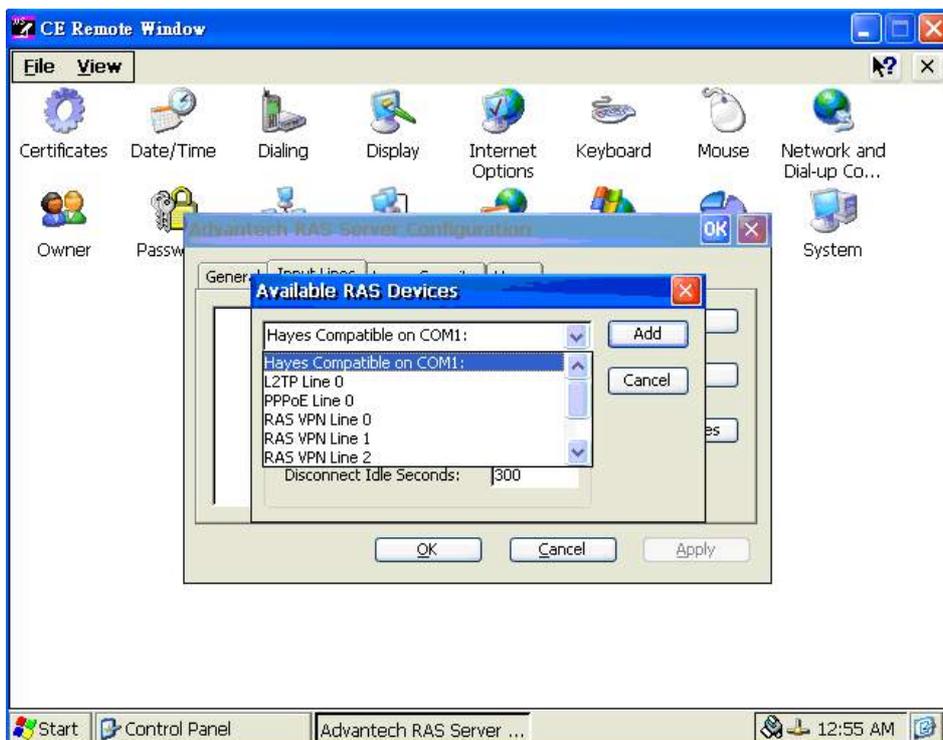
Step 2 : Double click the RAS Server icon from Control Panel.



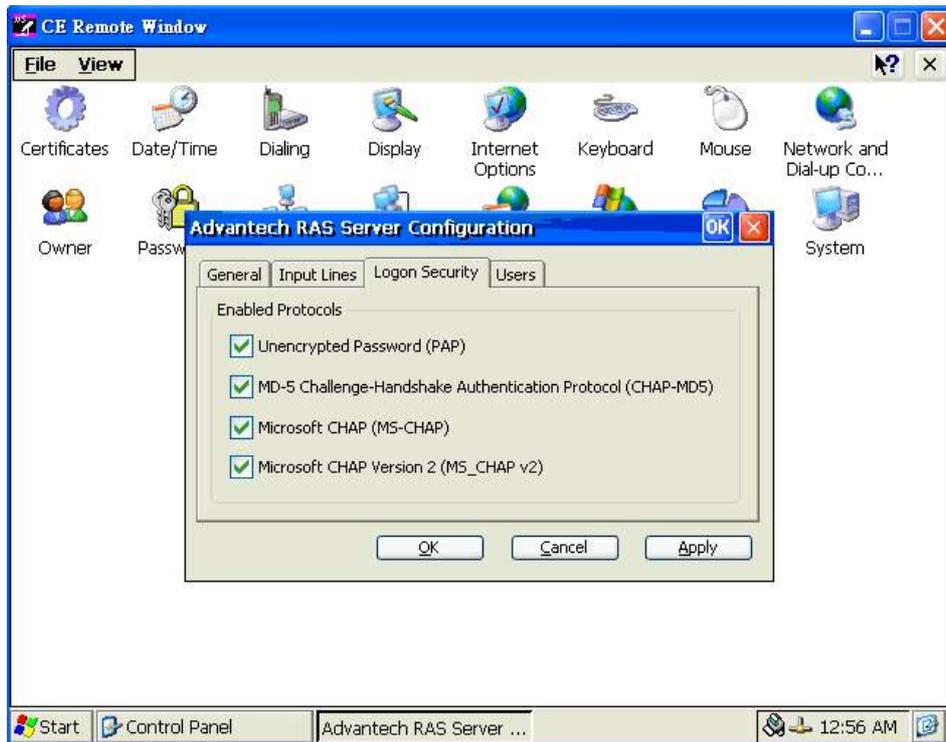
Step 3 : Select the “General” tab under “Advantech RAS Server Configuration”. Select “Enable RAS”, “Use Static IP Address” and enter a specified IP in Static IP Address blank.



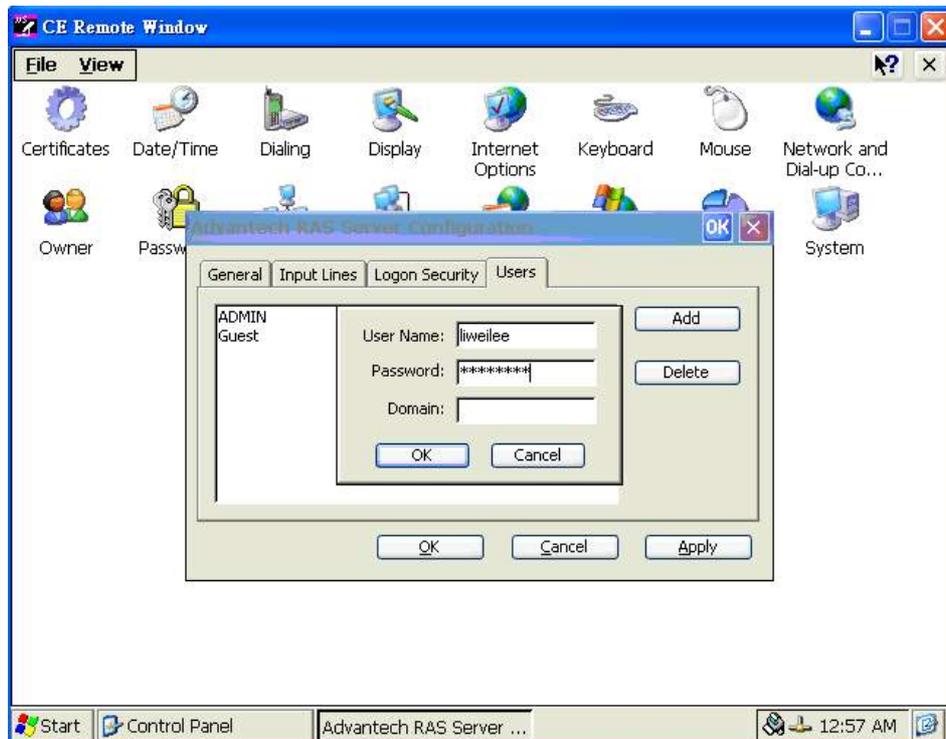
Step 4 : Select the “Input Lines” tab under “Advantech RAS Server Configuration”. Click **Add button to setup the input line according to the available RAS device.**



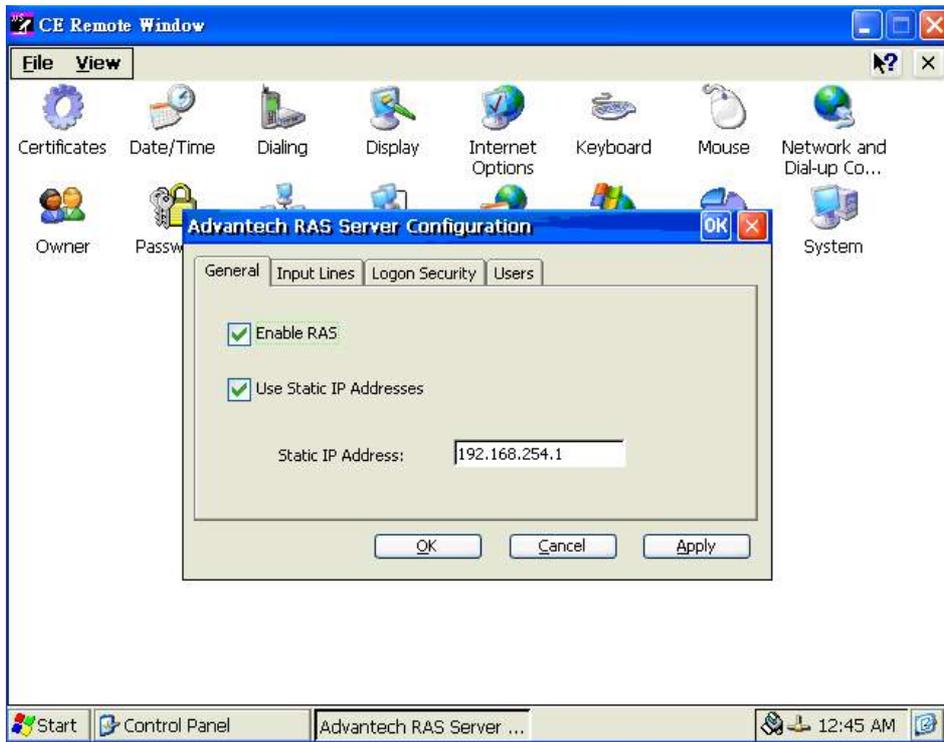
Step 5 : select the “Logon Security” tab under “Advantech RAS Server Configuration”. Select security protocol if necessary.



Step 6 : Select the “Logon Security” tab under “Advantech RAS Server Configuration”. Add a new account for remote access services.



Step 7 : After all settings are completed, press **Apply** button and then it will pop up the RasConfig dialog window. Press **Yes** button to save registry setting to storage card.



RAS configuration procedure is completed and you can access ADAM-6501 via remote device.

4.4 Autorun Configuration Note

Introduction

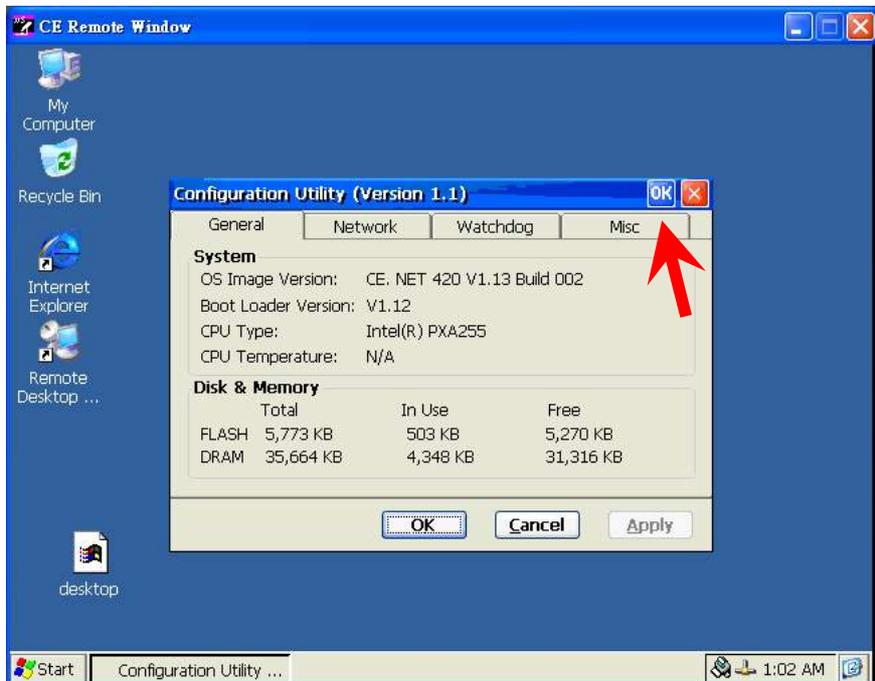
This document introduces how to execute applications automatically when you boot ADAM-6501 up.

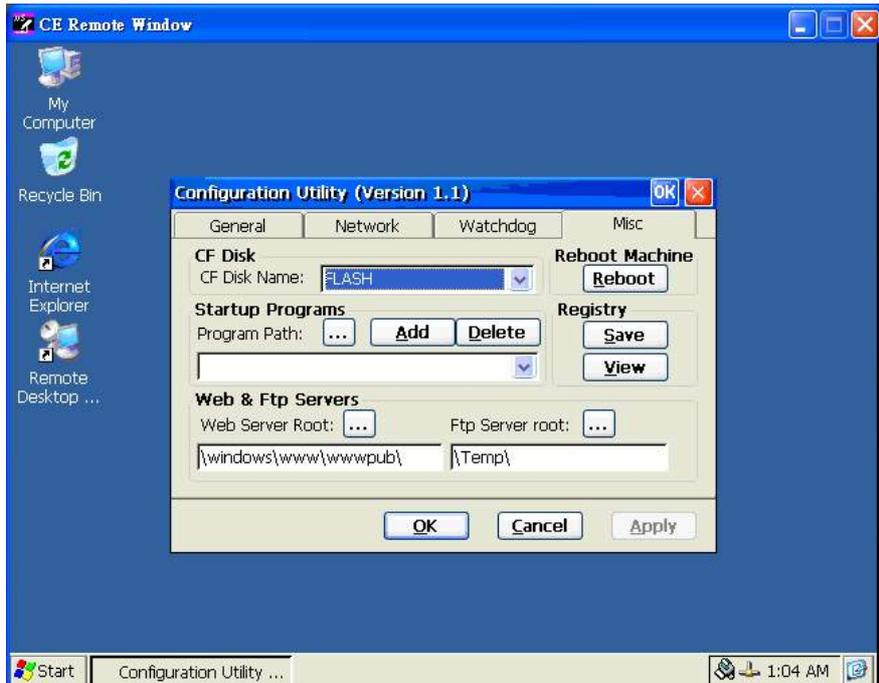
Autorun Configuration Procedure

Step 1 : Execute the “ADAM Configuration Utility”

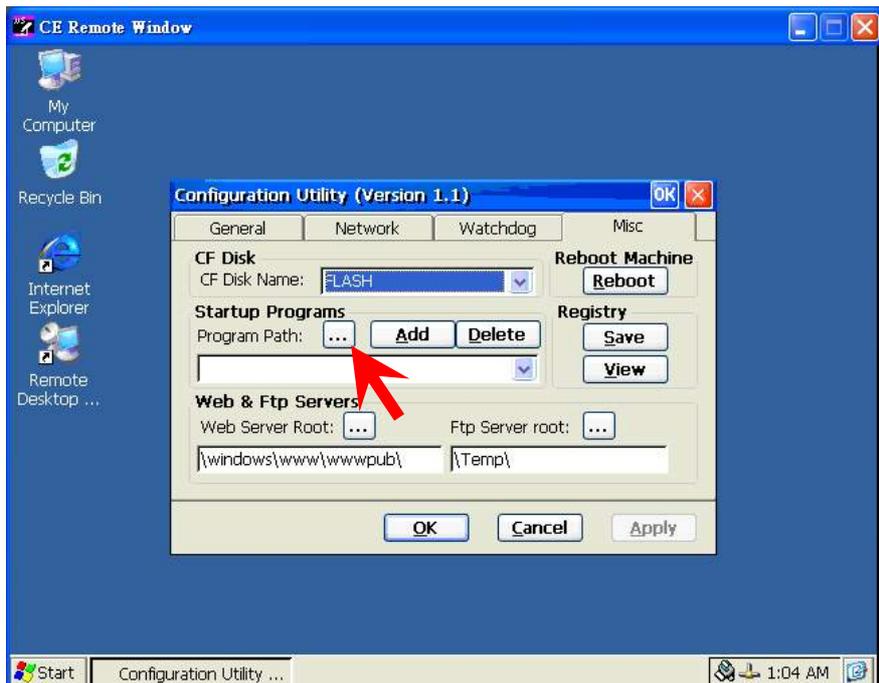


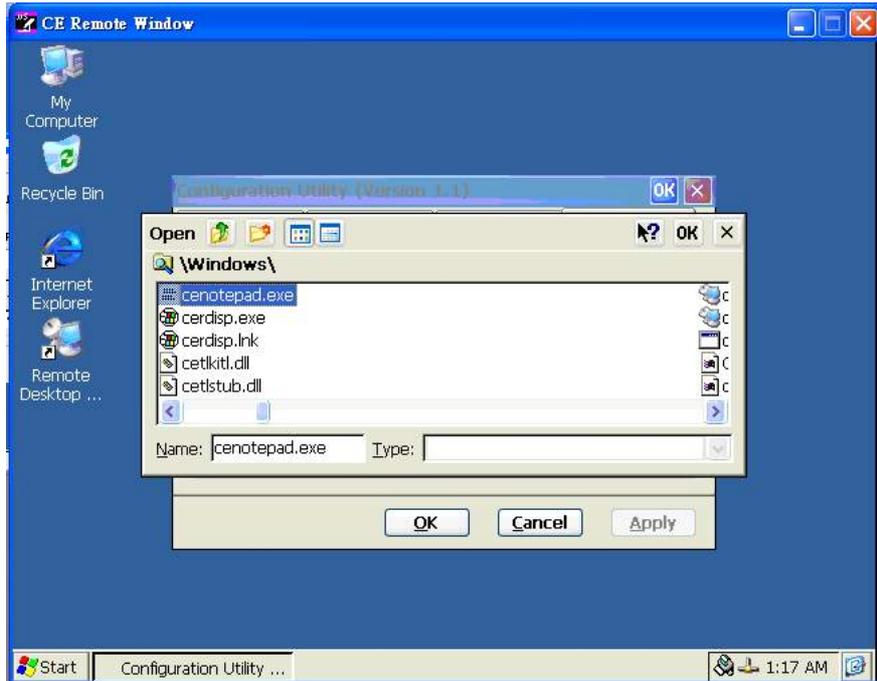
Step 2 : Go to the “Misc” page in ADAM Configuration Utility.





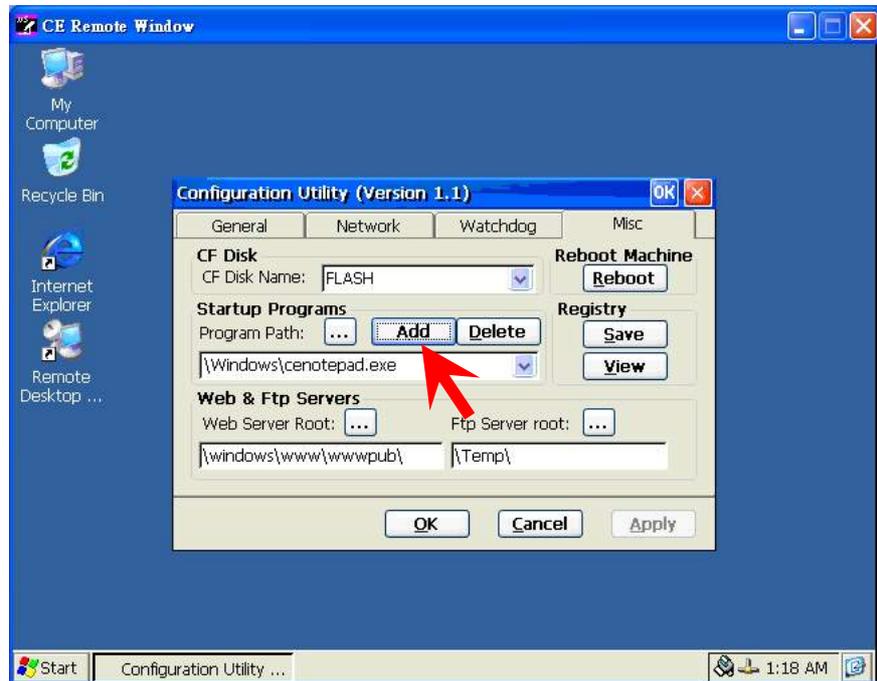
Step 3 : Click on the “Program Path” bottom for selecting the program for Auto-Run setting..

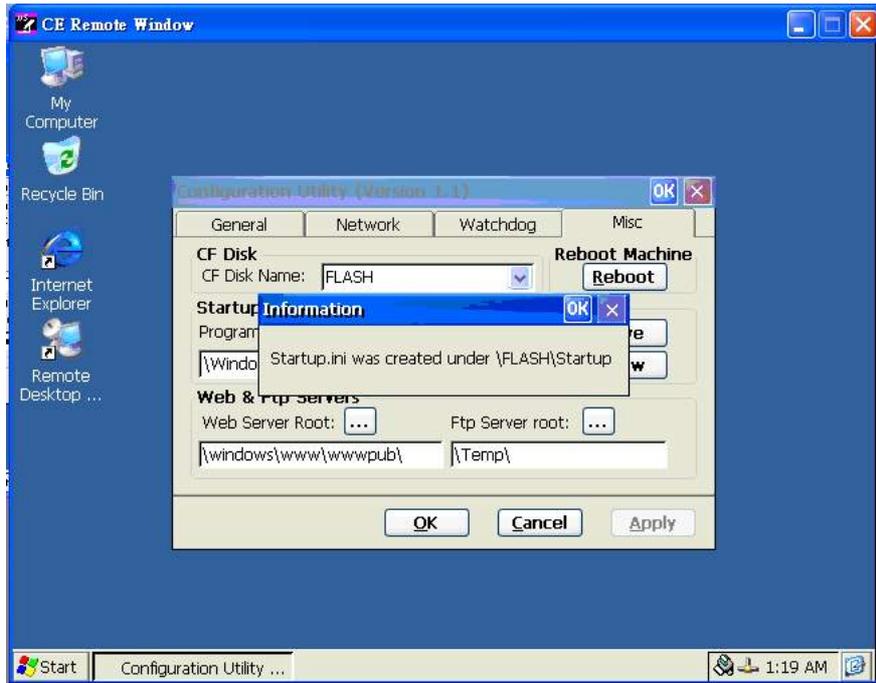




Please choose the program then press “OK”.

Step 4 : Click on the “Add” bottom to set the program for Auto-Run action.





The ADAM Configuration Utility will add the selected program in Auto-Run requirement. Please press "OK" to finish the configuration.

4.5 Application Development Procedure

Introduction

ADAM-6501 provides the Software Development Kit (SDK) and the built-in runtime library; you can use your existing windows-based programming skills to develop applications easily and rapidly through those tools. This document introduces how to develop custom application step by step.

Application development Procedure

2. Install Microsoft eMbedded Visual C++ V4.00 with Service Pack 2

The Microsoft eMbedded Visual C++ tool is a desktop development environment for creating applications and system components for Windows CE .NET-powered devices. This version features new capabilities such as C++ exception handling, Run Time Type Information (RTTI), and a plethora of new debugger functionalities. Before you begin to develop your application, you must install Microsoft eMbedded Visual C++ first.

3. Insert ADAM-6501 CD into the CD-ROM in the host PC.

4. Install ADAM-6501 Software Development Kit for eMbedded Visual C++ from below path:

Windows CE.NET V4.2\SDK\ADAM6501_SDK_V1.00.msi

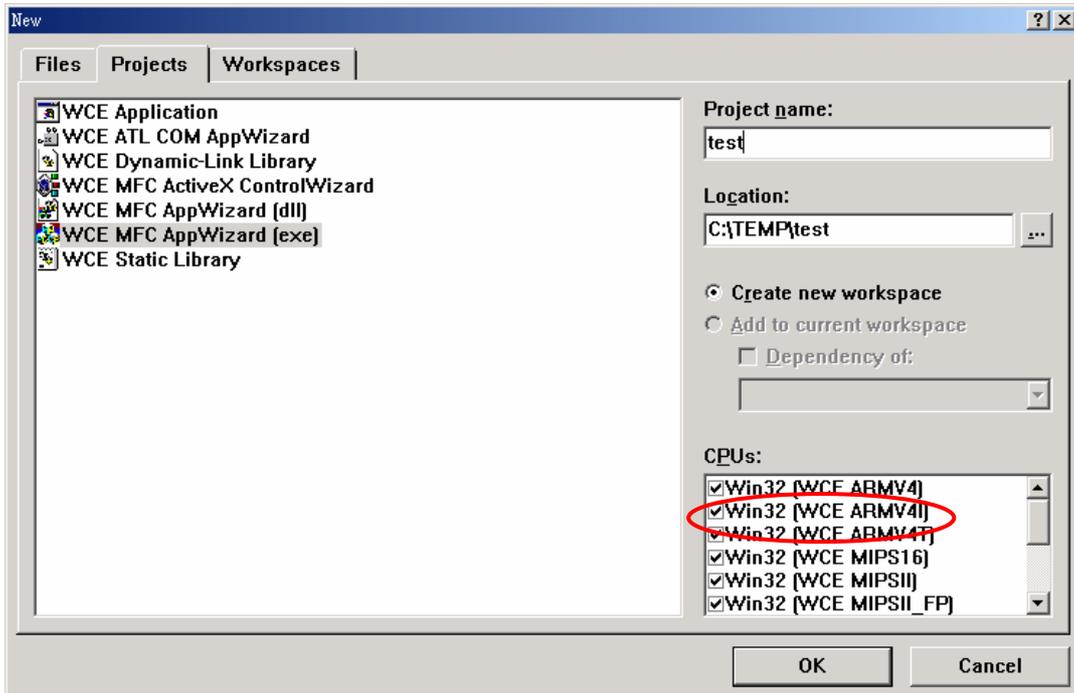
5. Install Microsoft ActiveSync 3.6 from below path:

Windows CE.NET V4.2\Utility\Microsoft ActiveSync 3.6.exe

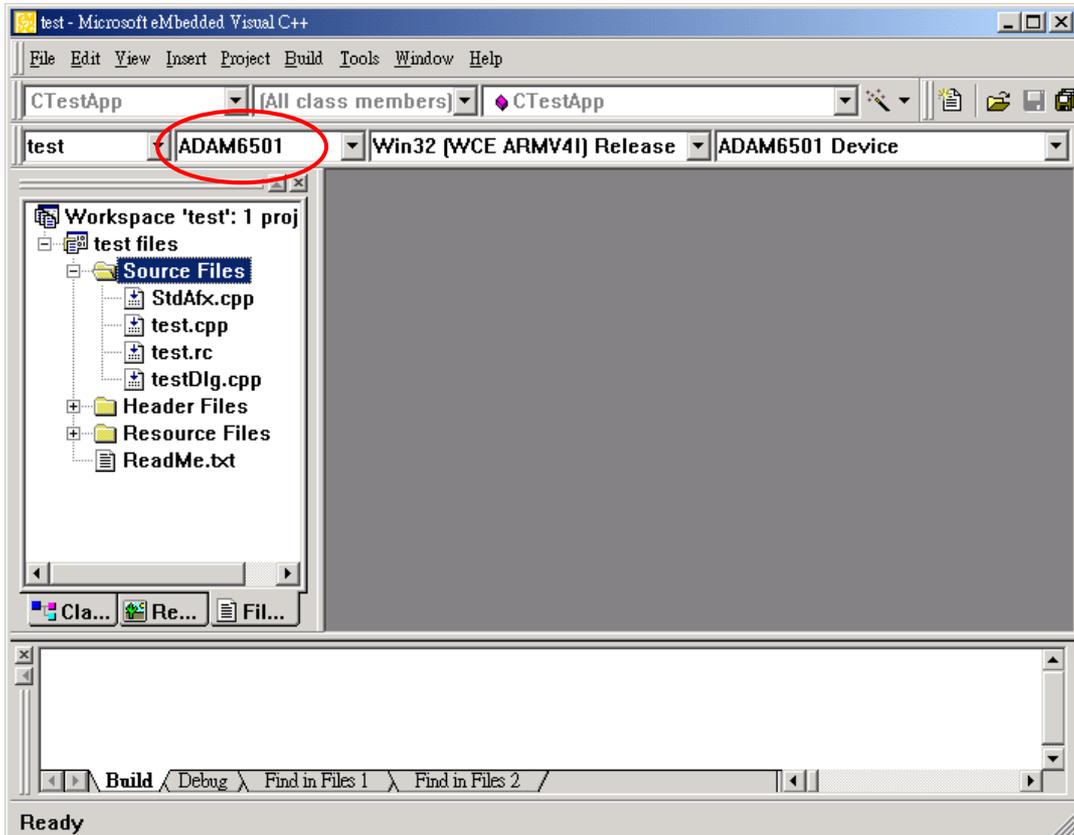
6. Build the connection between the host and ADAM-6501 via ActiveSync. Further information about *ActiveSync*, please refer to “**ActiveSync Connection**”.

7. Execute eMbedded Visual C++.

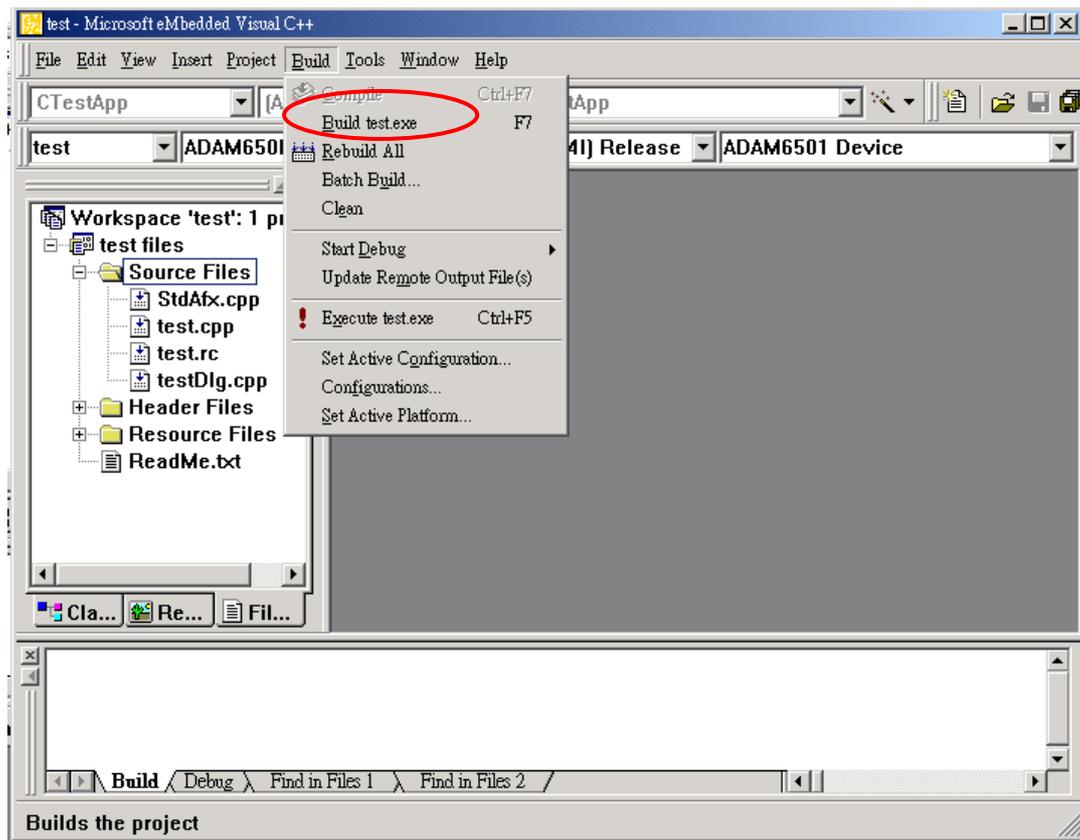
8. Select “File” → “New” to open a new project. Select your project type in the left blank of window and enter the *new project name / location* in the right side of window. Please note that CPU type must select **Win32 (WCE ARMV4I)**.



9. Select “ADAM6501” in the main window of eMbedded Visual C++.



10. After you complete above configuration procedure, you can start to develop your application. Press **“Build”**→ **“Build xxx.exe”** to compile your program to **.exe** file and download it to ADAM-6501.



11. If you want to execute your program, press **“Build”** → **“Execute xxx.exe”** and then the program will be executed in ADAM-6501.

4.6 Save your settings

Once you made changes for ADAM6501, you may need run RegSave.exe to save Windows CE system Registry to CF card or on-board flash disk to keep your settings. See [Registry Saving](#) section for detail.

Registry Saving

Running RegSave.exe to save system Registry to CF card or on-board Flash. you can specify command line parameter for RegSave.exe shown as below:

```
RegSave [-f] [-s] [-fs]
```

[-f] : Save Registry to Flash and CF card

[-s]: RegSave will not display any message despite whether the action is succeeded or not.

[-fs]: combination of [-f] and [-s]

If you running RegSave.exe without parameter, it will only save Registry to CF card and it will display message to notify you whether the Registry has been successfully saved.

4.7 ADAM-6501 Network Administration User Guide

Overview

Advantech ADAM-6501 series is a built-in Windows® CE solution offering a pre-configured image with optimized onboard device drivers. Micro Windows® CE is a compact, high-efficient and hard real-time operating system that is designed for embedded systems without HDD limitation.

ADAM-6501 remote administration is a powerful function, which allow users connect to field-site ADAM-6501 by standard browser and configure ADAM-6501's network and system settings remotely.

ADAM-6501 remote administration includes two major functions; network administration and system administration.

- Network administration – With ADAM-6501 well-configured, user can connect to local network or public network (Internet).

4.7.1 Network administration

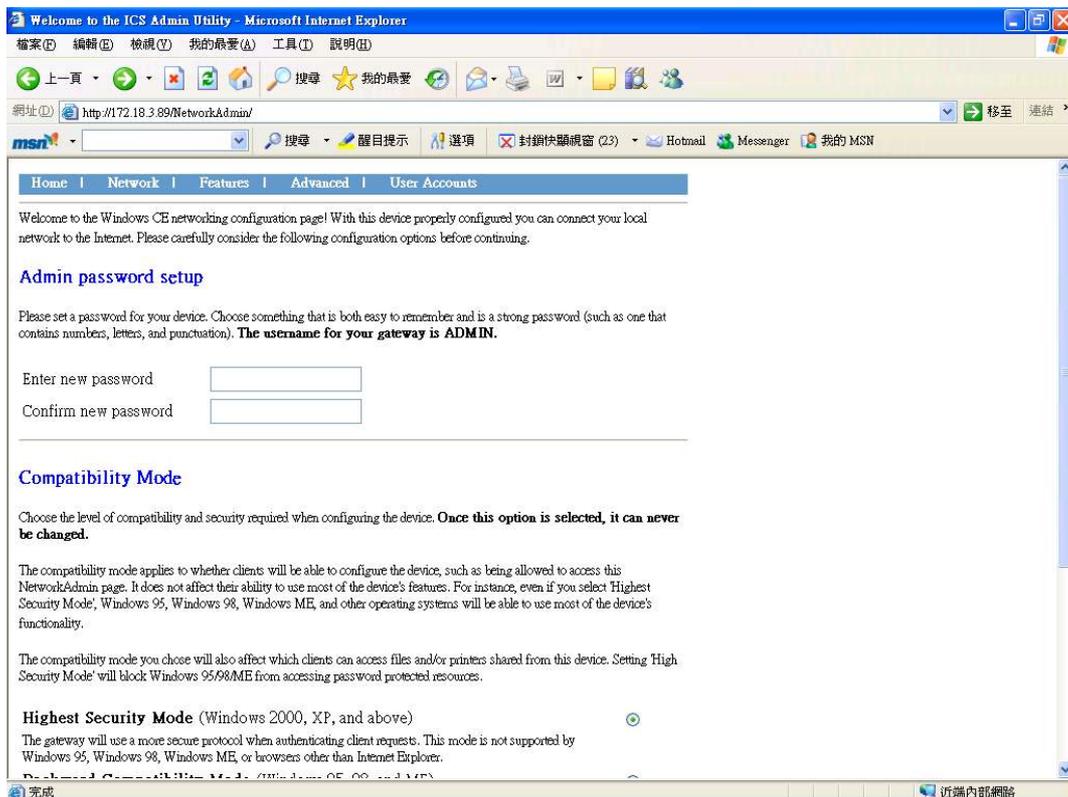
Following steps introduces how to connect the ADAM-6501 by standard browser, and configure the field-site ADAM-6501's network setting remotely.

Step1: Execute standard browser (for instance, Internet Explorer), and enter ADAM-6501 (which you would like to connect)'s IP address as below,

IP address/networkadmin

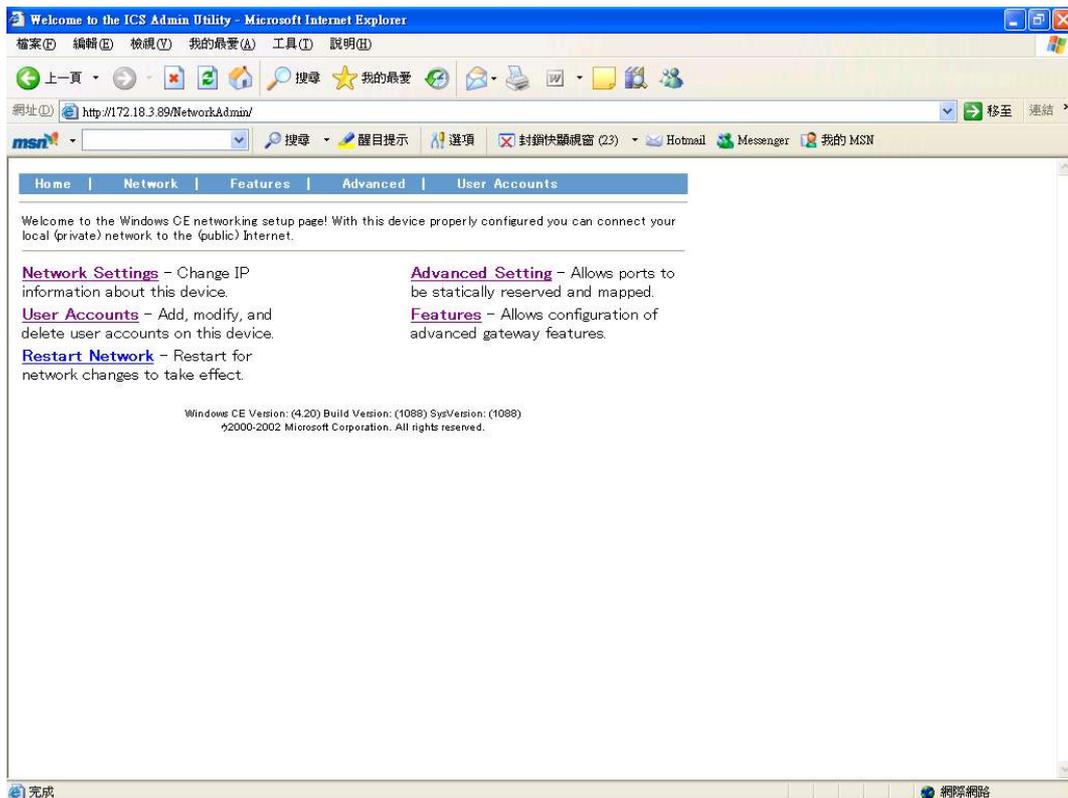
Instance: 172.18.3.89/networkadmin

Step2: System will ask you to enter password when you login ADAM-6501 first time.



NOTE: The default user name is ADMIN

Step3: Connect to the ADAM-6501 again, and the system will ask you to enter user name and password. After authorization, you will enter Windows CE networking setup page.



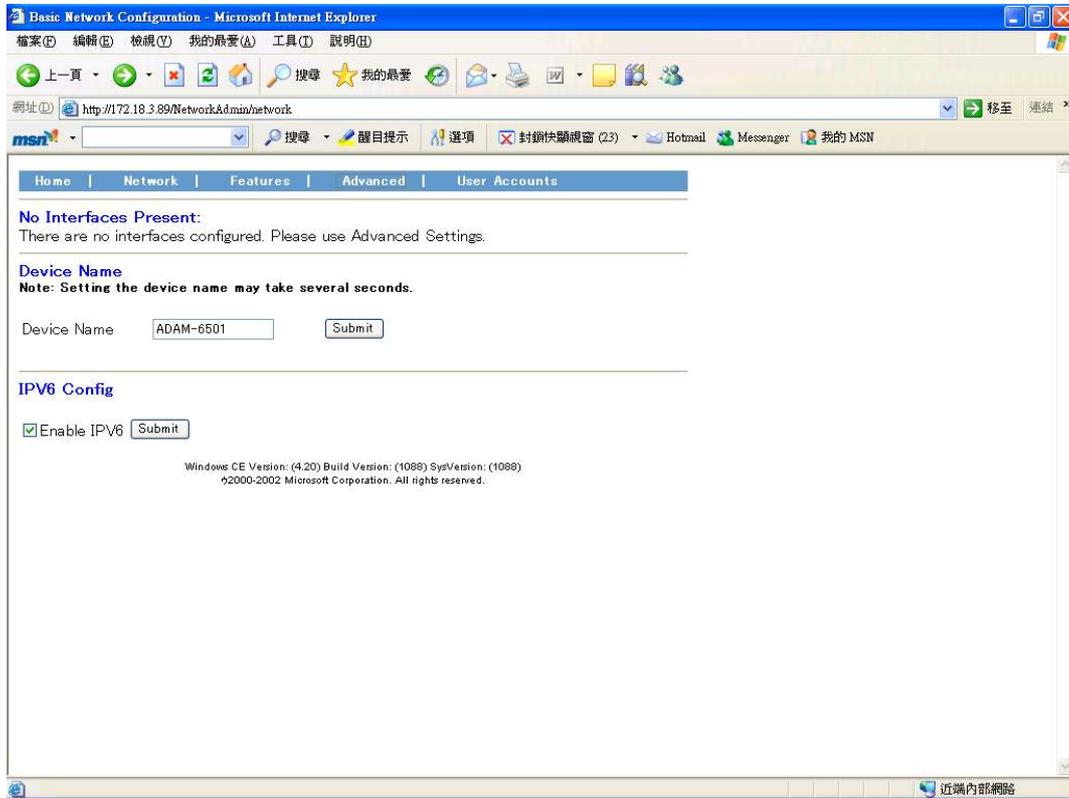
Network settings

Change IP information about the ADAM-6501.

1. Change device name

Enter proper device name and press Submit button.

Please **MUST** change ADAM-6501's device name at your first usage.



NOTE: When you change the device name, ADAM-6501 will register his device name to DNS (Domain Name Server) automatically. If you would like to search this ADAM-6501 next time, you can search it by his device name instead of IP address.

```
(C) Copyright 1985-2000 Microsoft Corp.

C:\Documents and Settings\vincent.chang>ping uno-2059_1

Pinging uno-2059_1 [172.18.3.89] with 32 bytes of data:

Reply from 172.18.3.89: bytes=32 time<10ms TTL=128

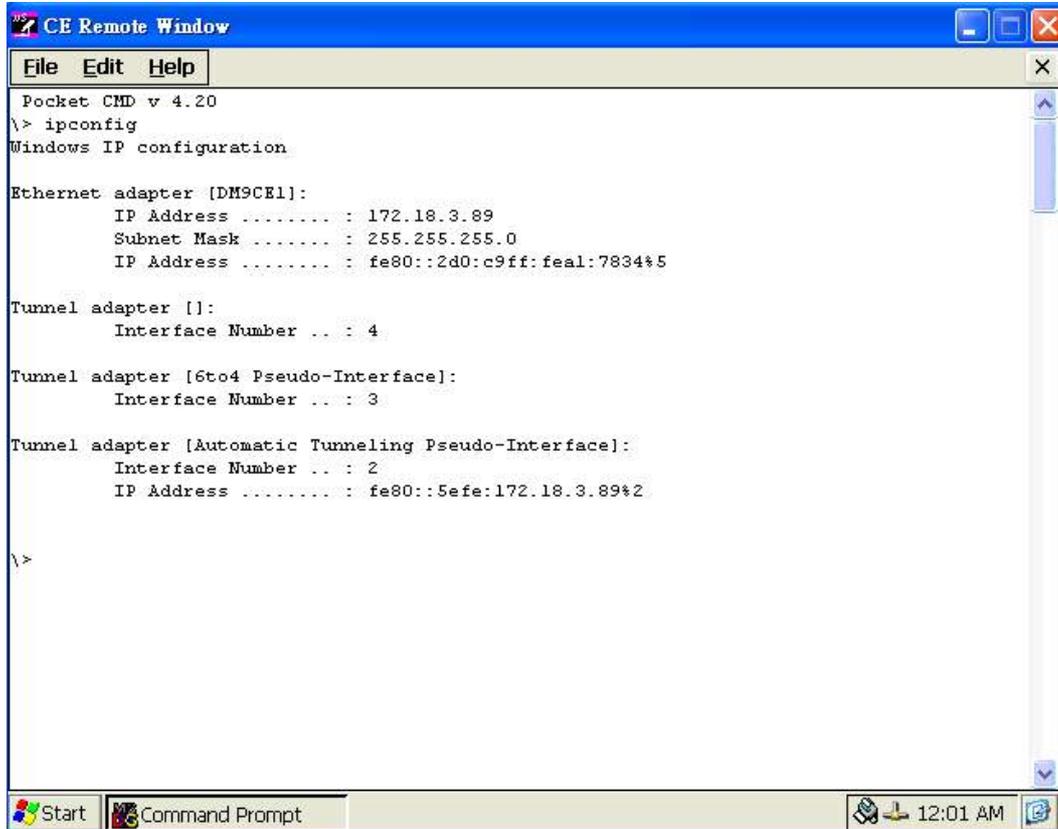
Ping statistics for 172.18.3.89:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Documents and Settings\vincent.chang>
```

IPV6

If you want to enable "IPV6", please check "Enable IPV6" and press Submit button.

System will ask you to restart ADAM-6501, the ADAM-6501 will support IPV6 after restarting.



```
Pocket CMD v 4.20
\\> ipconfig
Windows IP configuration

Ethernet adapter {DM9CE11}:
    IP Address . . . . . : 172.18.3.89
    Subnet Mask . . . . . : 255.255.255.0
    IP Address . . . . . : fe80::2d0:c9ff:feal:7834%5

Tunnel adapter [{}]:
    Interface Number . . : 4

Tunnel adapter [6to4 Pseudo-Interface]:
    Interface Number . . : 3

Tunnel adapter [Automatic Tunneling Pseudo-Interface]:
    Interface Number . . : 2
    IP Address . . . . . : fe80::5efe:172.18.3.89%2

\\>
```

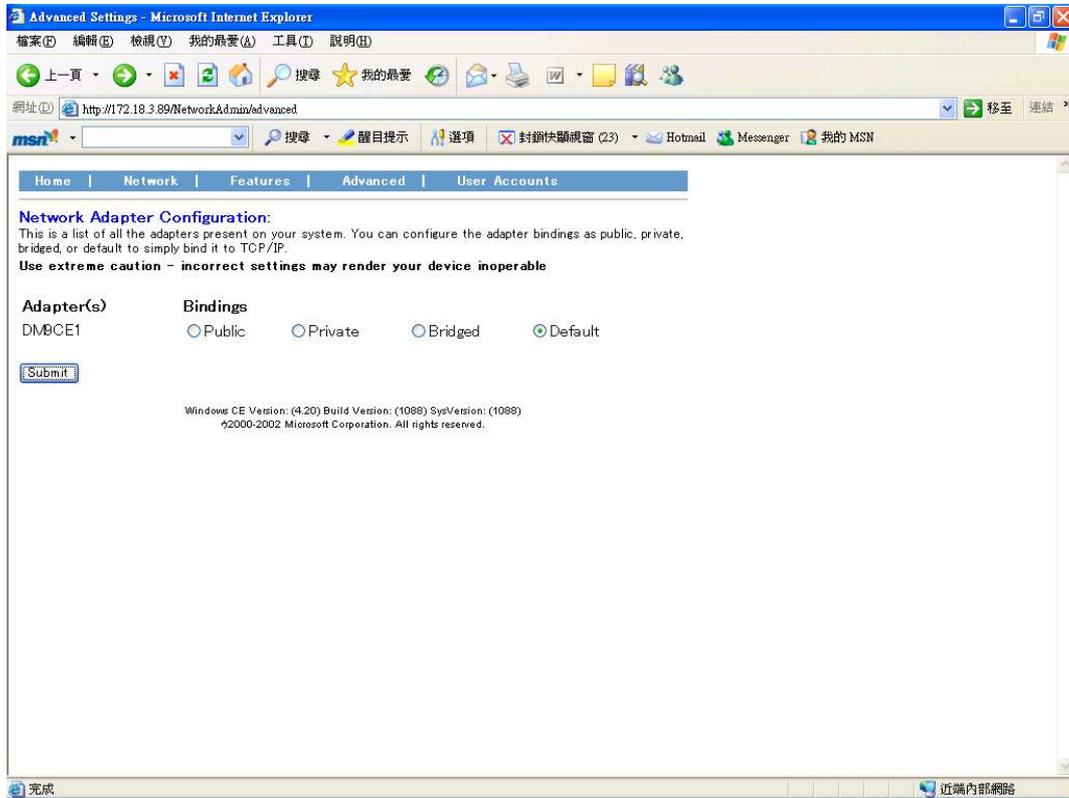
The screenshot shows a 'CE Remote Window' with a menu bar (File, Edit, Help) and a command prompt interface. The command 'ipconfig' has been executed, displaying the IP configuration for three network adapters: an Ethernet adapter (DM9CE11) with IPv4 address 172.18.3.89 and IPv6 address fe80::2d0:c9ff:feal:7834%5; a Tunnel adapter [{}]; and a Tunnel adapter [Automatic Tunneling Pseudo-Interface] with IPv6 address fe80::5efe:172.18.3.89%2. The taskbar at the bottom shows the Start button, 'Command Prompt' task, and system tray with the time 12:01 AM.

Advanced Setting

“Advanced setting” function allows ports to be statically reserved and mapped.

System will list all of the adapters present on the ADAM-6501. You can configure the adapter bindings as public, private, bridged, or default to simply bind it to TCP/IP.

Caution: Incorrect settings may render the ADAM-6501 inoperable.



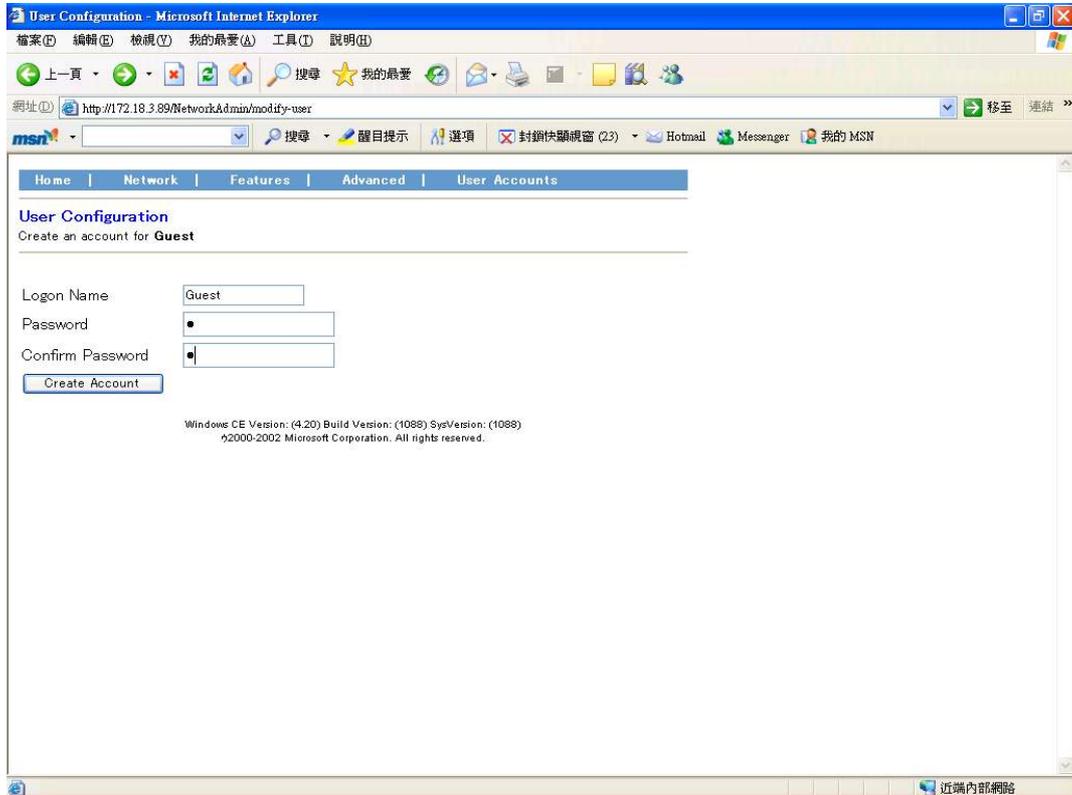
User Accounts

“User Accounts” function allows you to add, modify and delete user accounts on this ADAM-6501.

1. Create a user account

<1-A> Enter a proper user name in the “Create a new user...” field, and press Create button.

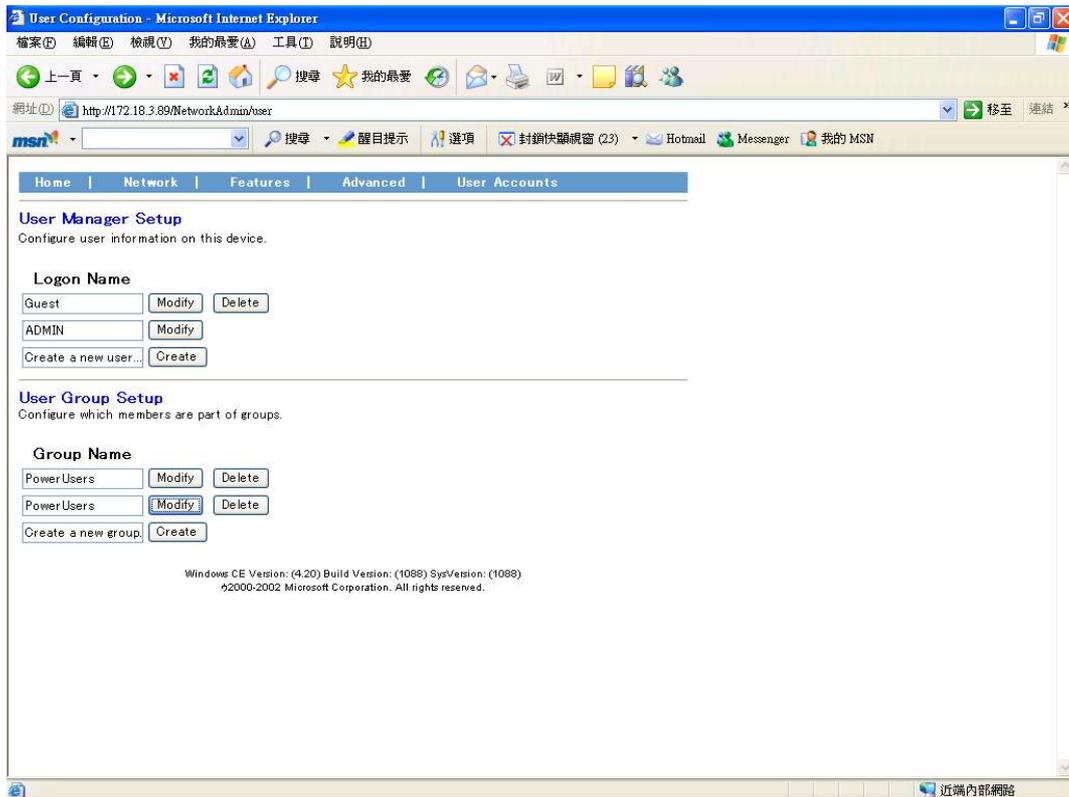
<1-B> Enter a password for this account, and press Create Account button.



<1-C> System will create a user account according to your information.

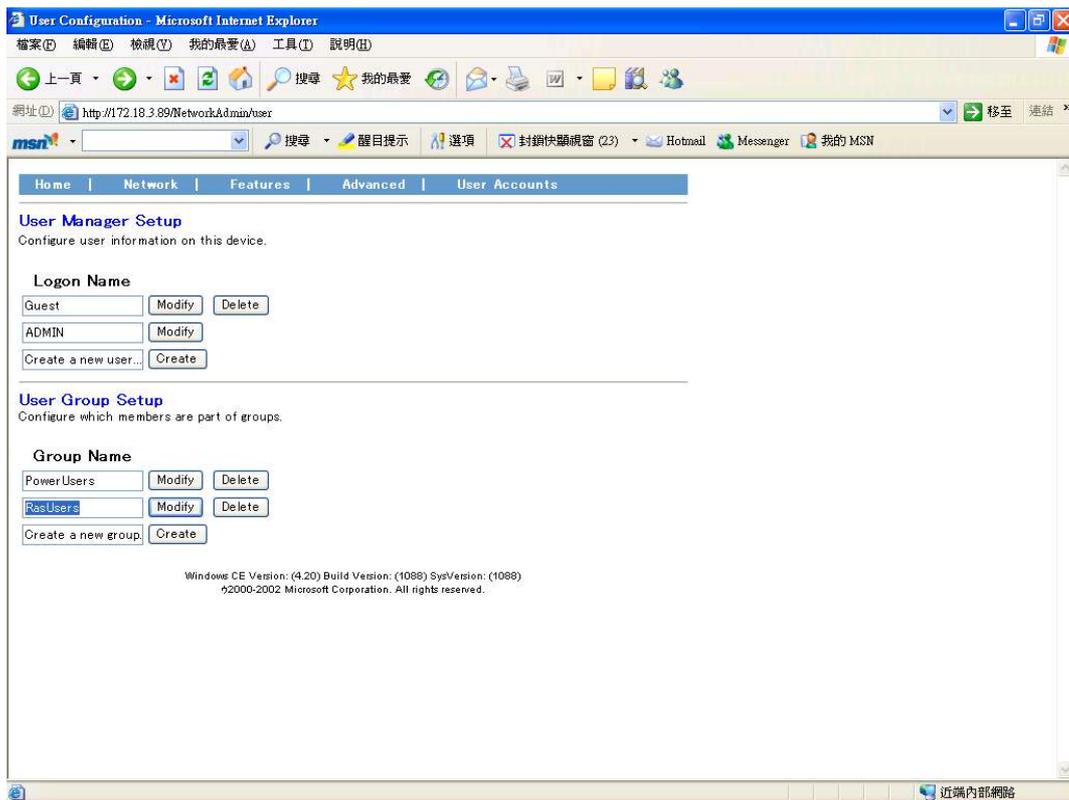
If you would like to change the password of this user account, please press Modify button behind the user name.

If you would like to delete the user account, please press Delete button behind the user name.

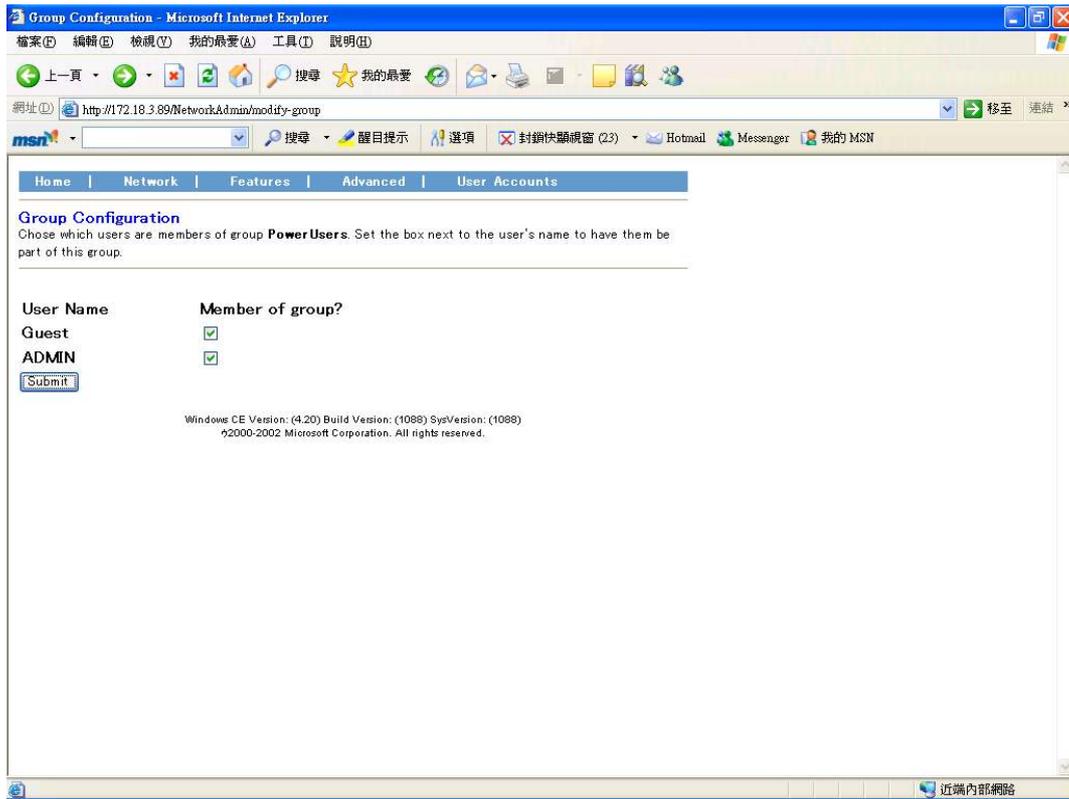


2. Create a group

<2-A> Enter a proper group name in the “Create a new group...” field, and press Create button.



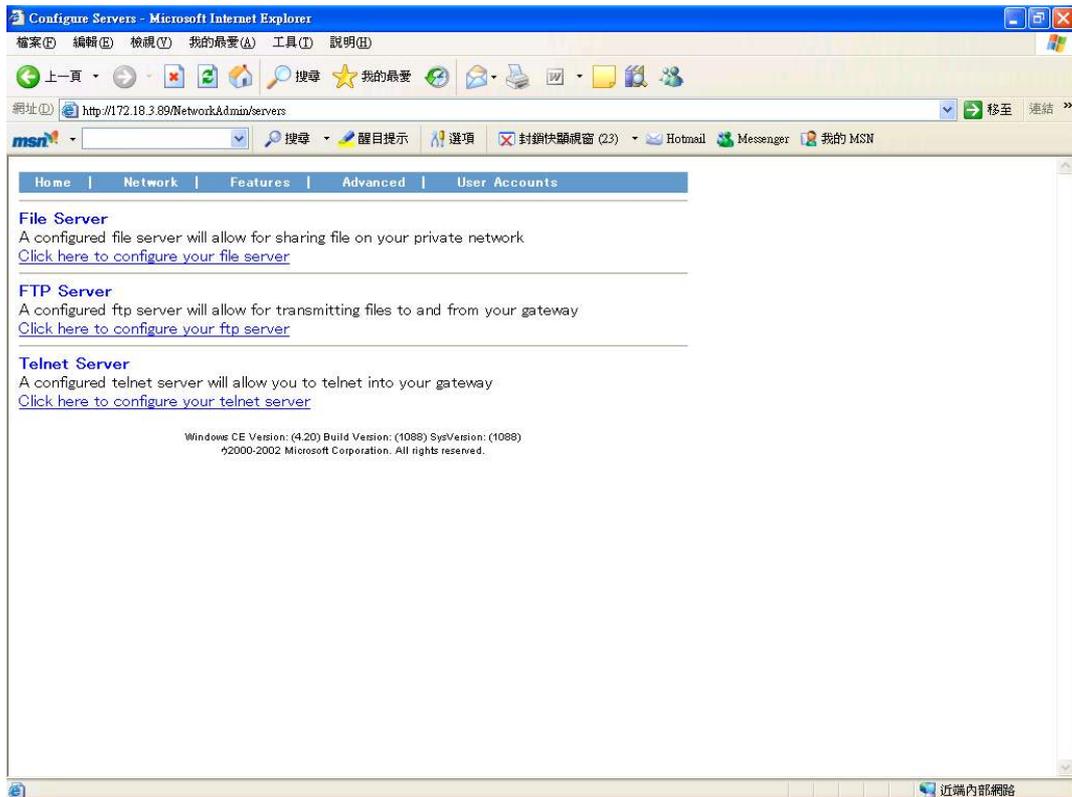
<2-B> If you want to chose which users are members of group, please press Modify button behind the group name.
Set the box next the user's name to have them be part of this group.



<2-C> If you want to delete a group, please press Delete button behind the group name.

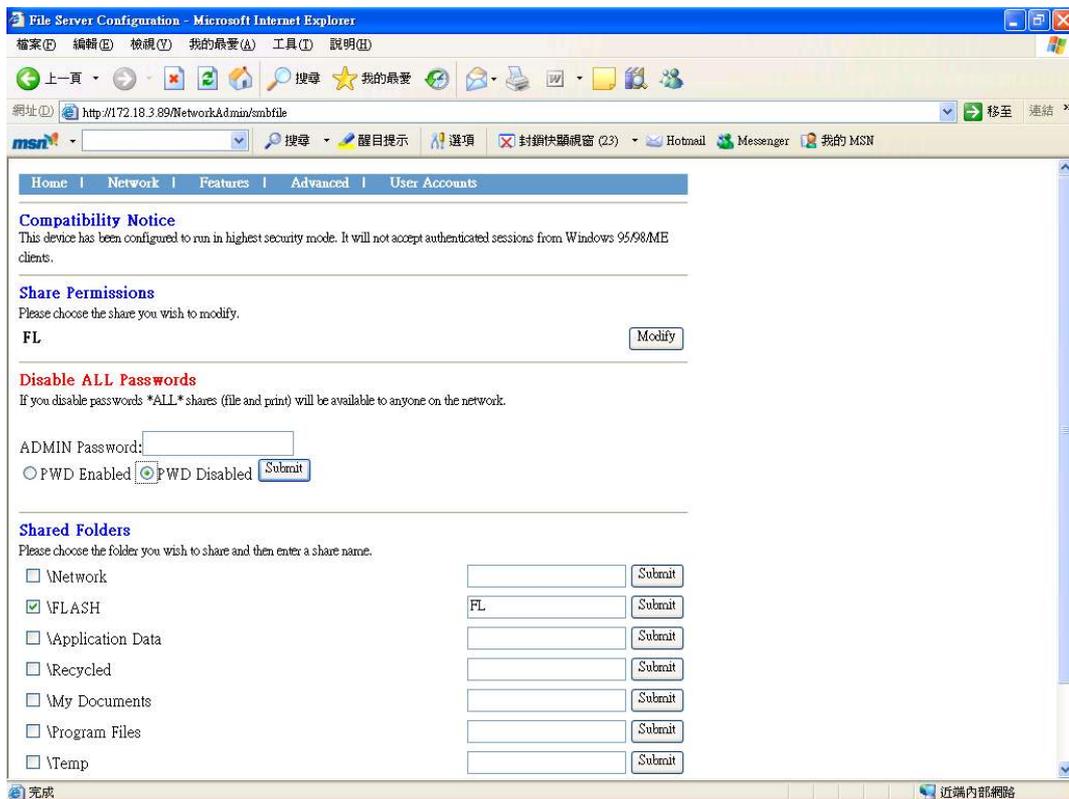
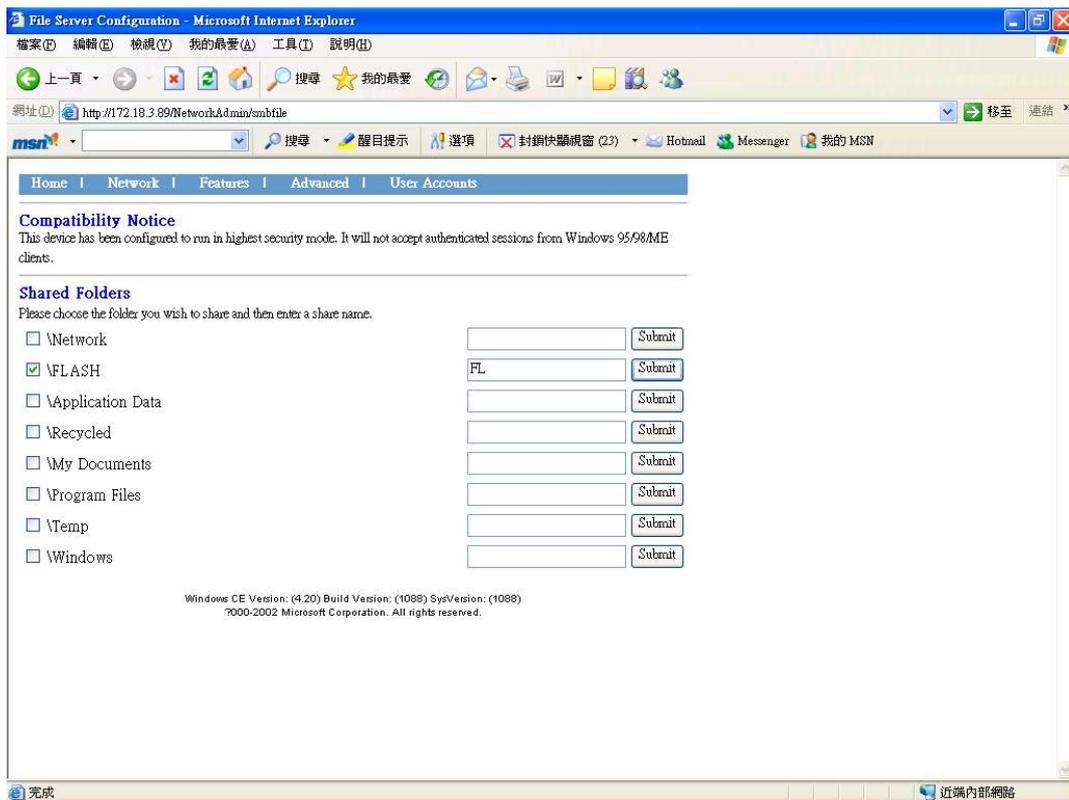
Features

Allows configuration of advanced gateway features. You can configure the File server, FTP server and Telnet server accordingly.



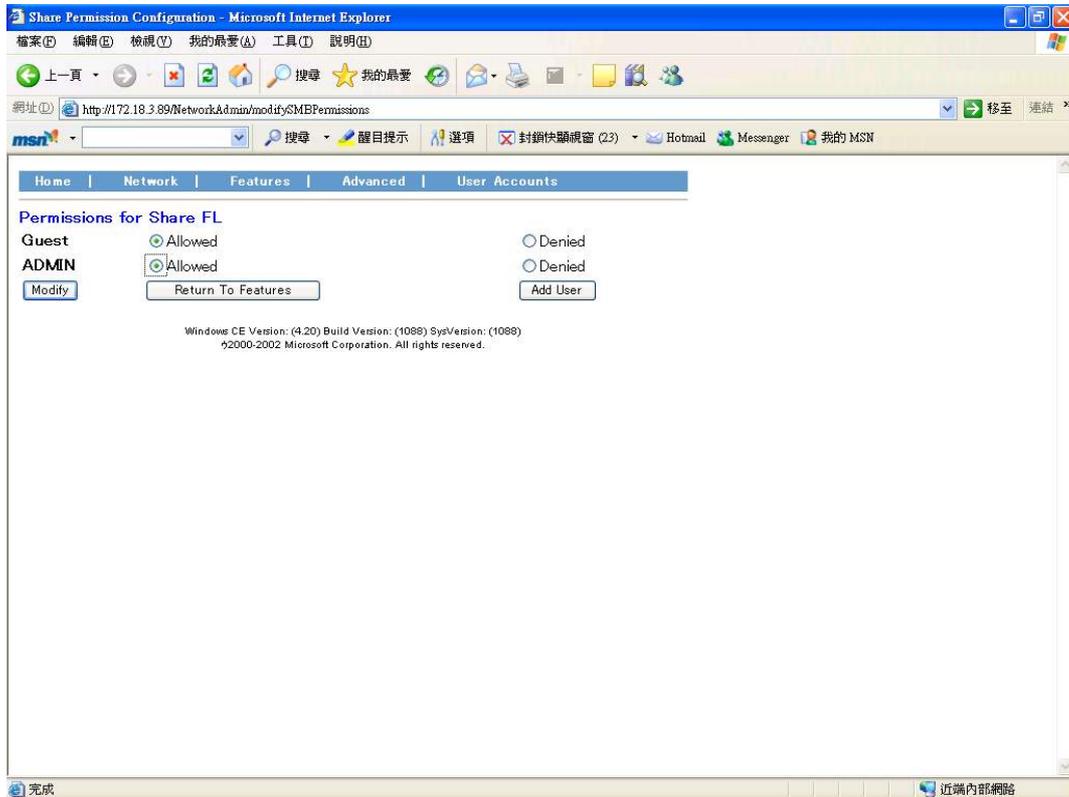
4.7.2 File Server

<A-1> Choose the folder in ADAM-6501 you wish to share and then enter a share name then press "Submit".



<A-2> Press Modify button, and then you can set the permissions for the share folder.

If you want to share this folder to anyone on the network, please select “PWD Disable” and press Submit button.



How to create a network disk??

Windows CE provides the command to enable remote network disk as a local disk.

<Command>

Usage:

```
net use [<local name>|*] [<remote name>] [/user:<username>] [/d]
```

or

```
net view <computername> | /DOMAIN:<domainname>
```

<Description>

[/d] Disable network disk

<Instance>

Step1: Share the folder in the remote site to authorized user, and set the permissions (read/write).

<EX> Remote Windows PC: <Computer name> = NB940107

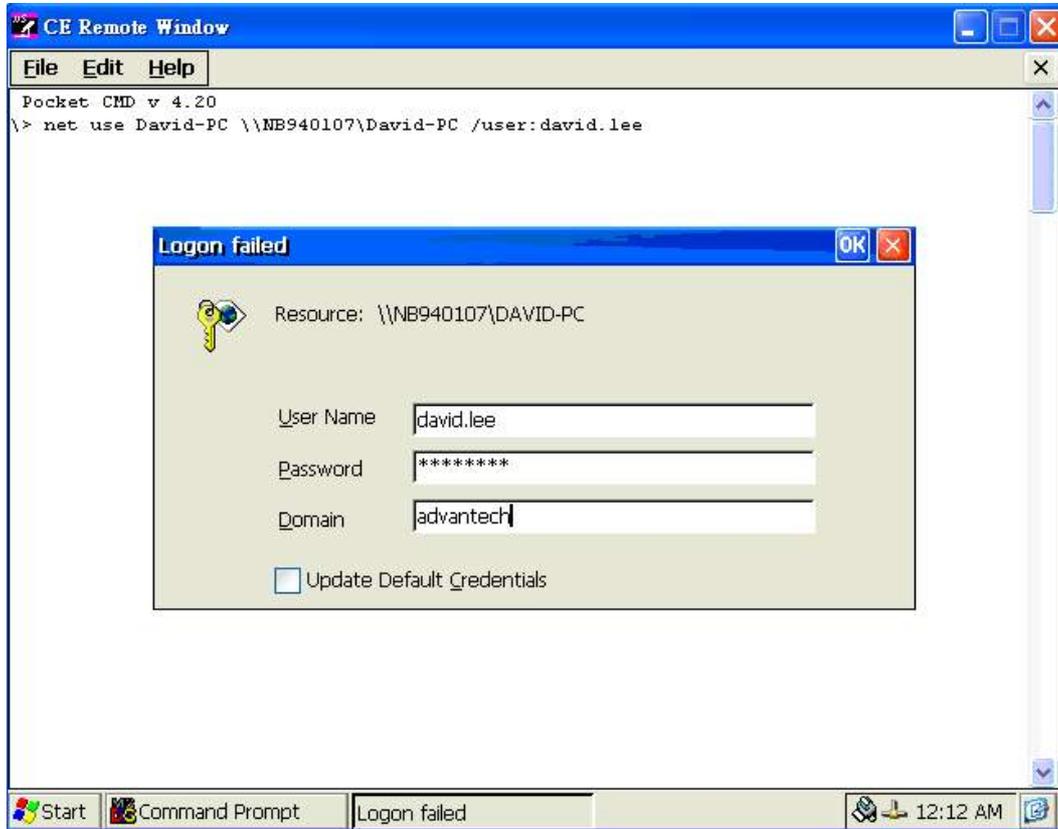
<Shared folder name> = David-PC

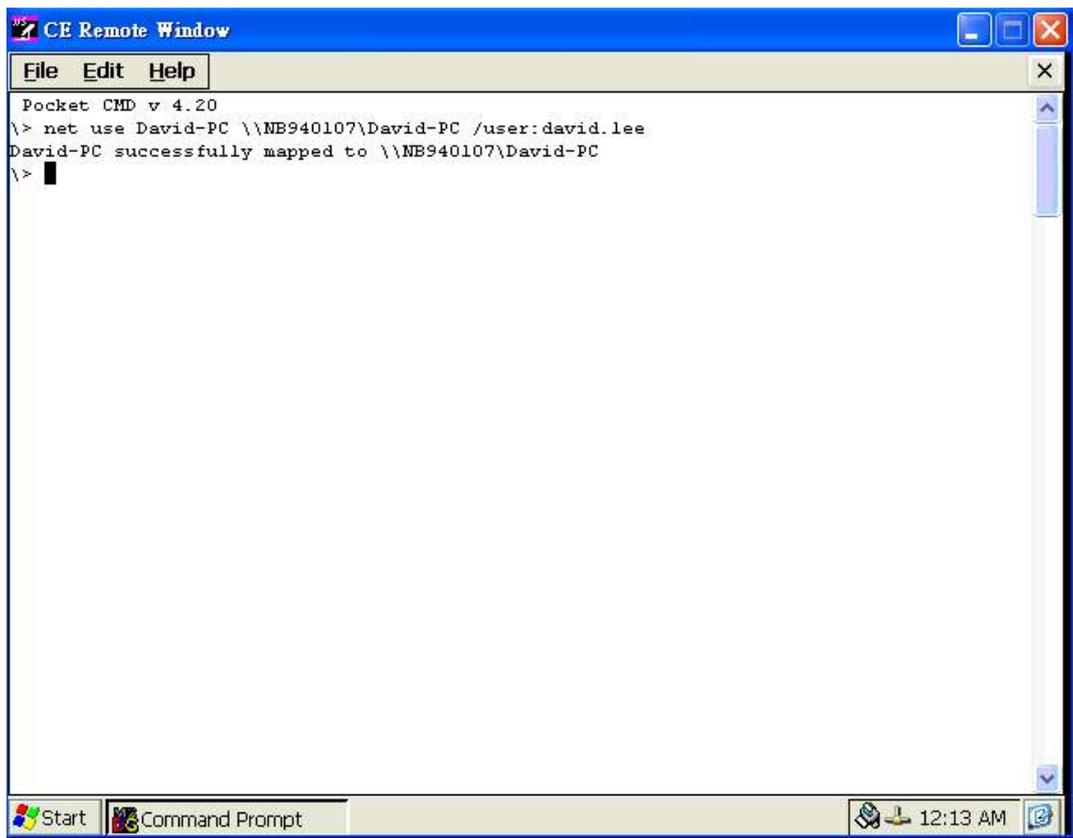
<Authorized user name> = david.lee

Step2: Execute the blow command by local ADAM-6501's command prompt, and system will ask you to enter your user name, password and domain.

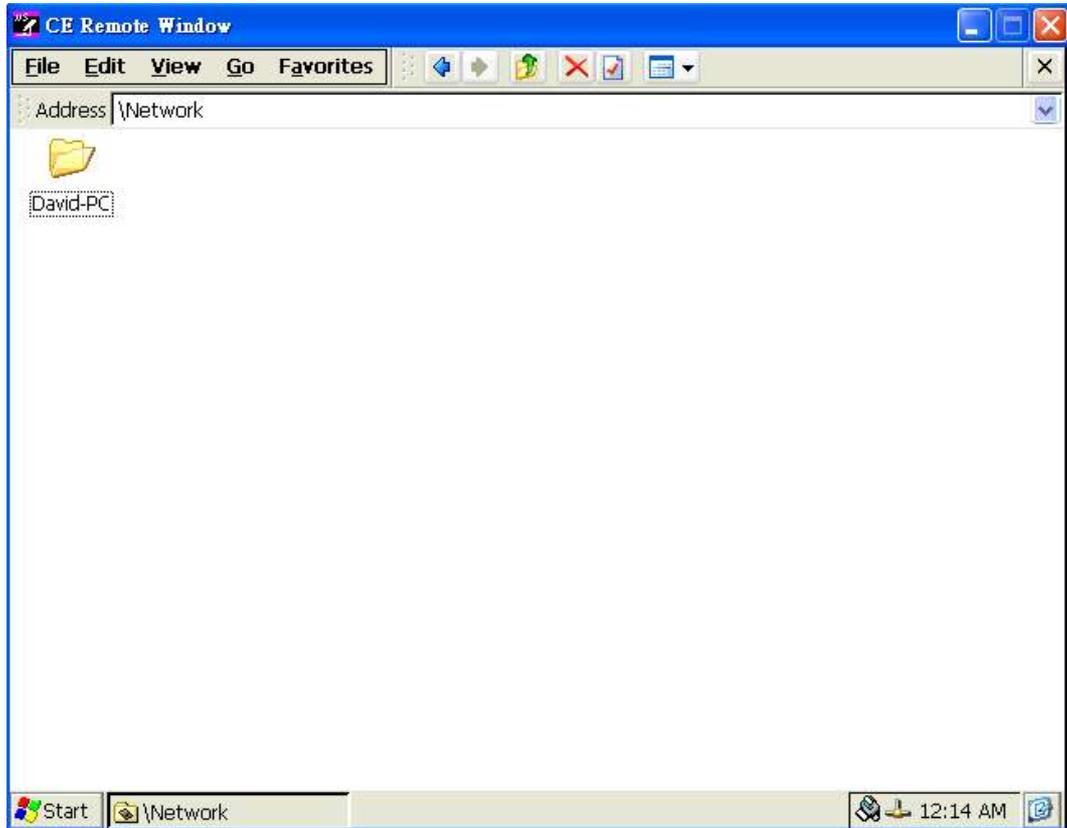
PS: if you would like to save your user name and password as "default user", please check "Update Default Credentials".

<EX> net use David-PC \\NB940107\David-PC /user:david.lee





Step3: The remote network disk (Ex:\\Pocheng-xp\DataCenter) will launch in the local ADAM-6501's "Network" folder (EX: \Network\DataCenter).



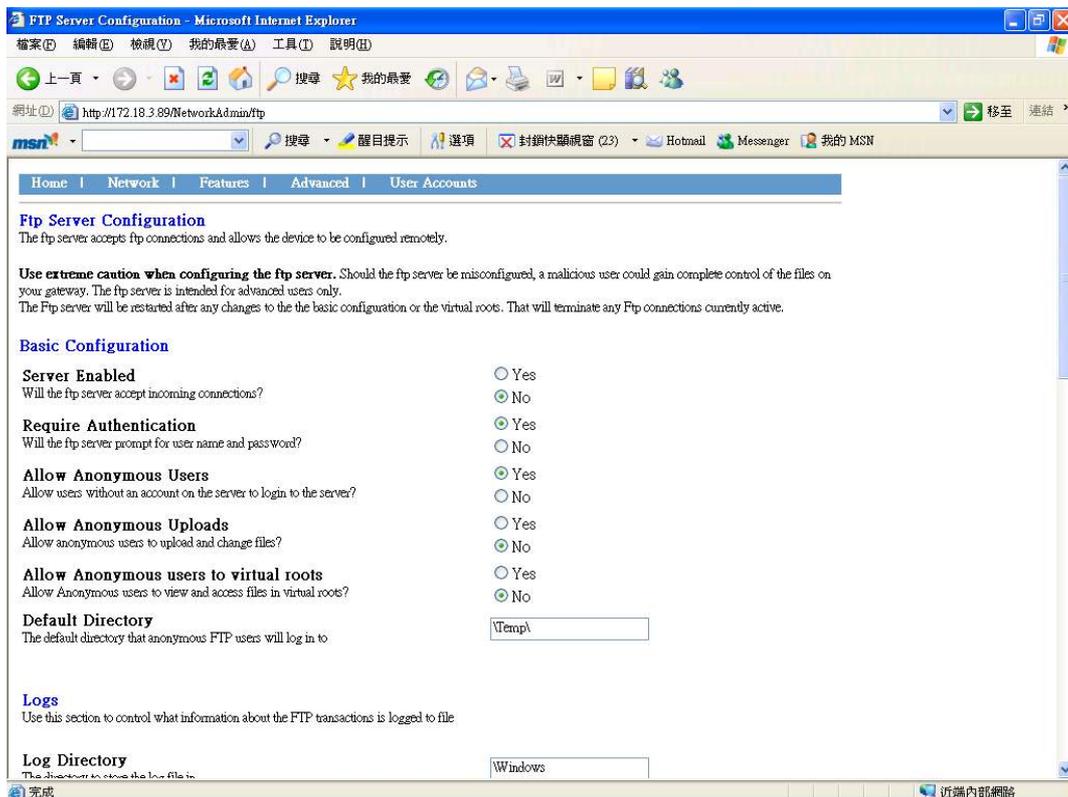
4.7.3 FTP Server

The FTP server accepts ftp connections and allows the ADAM-6501 to be configured remotely.

Basic Configuration

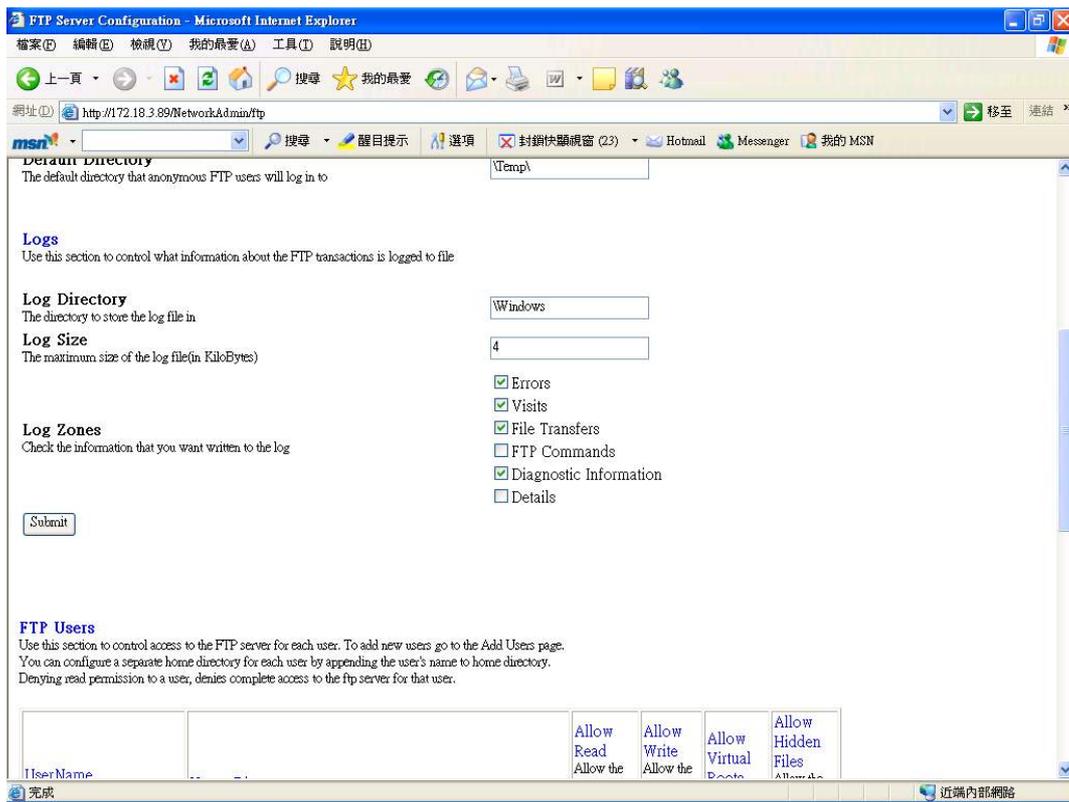
You can set following items in Basic Configuration field..

- *Server enabled*- Will the FTP server accept incoming connections?
- *Require authentication*- Will the FTP server prompt for user name and password?
- *Allow anonymous users*- Allow users without an account on the server to login to the server?
- *Allow anonymous uploads*- Allow anonymous users to upload and change files?
- *Allow anonymous user to virtual roots*- Allow anonymous users to view and access files in virtual roots?
- *Default Directory*- The default directory that anonymous FTP users will log in to.



Logs

Use Logs section to control what information about the FTP transactions is logged.



FTP Users

Use FTP Users section to control access to the FTP server for each user. To add new user, please go to the "User Account" page.

You can configure a separate home directory for each user by appending the user's name to home directory.

Denying read permission to a user, denies complete access to the FTP server for that user.

FTP Users

Use this section to control access to the FTP server for each user. To add new users go to the Add Users page. You can configure a separate home directory for each user by appending the user's name to home directory. Denying read permission to a user, denies complete access to the ftp server for that user.

UserName The login name of the user	Home Directory The path to user's home directory	Allow Read Allow the user to login and download files from the server	Allow Write Allow the user to upload and change files on the server	Allow Virtual Roots Allow the user to view the virtual roots	Allow Hidden Files Allow the user to view hidden and system files on the server
Guest	VFLASHFTPROOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ADMIN	\	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

(If the user name is in red, the values in that row are only recommended values. Please edit as appropriate and click on "Update Users" for the values to take effect)

Submit

Virtual Roots

Use this section to add/delete virtual roots to the FTP server. Virtual roots allow you to map a physical directory to an directory with a different name. If the user has permissions to see virtual roots, these roots will appear as folders under the user's home directory. The virtual directory name cannot contain of the following characters: \<>*/ The directory path cannot contain any character from the previous list as well, but may

Virtual Roots

You can add/delete virtual roots to the FTP server. Virtual roots allow you map a physical directory to and directory with a different name.

The screenshot shows the 'FTP Server Configuration' page in Microsoft Internet Explorer. The browser's address bar displays 'http://172.18.3.89/NetworkAdmin/ftp'. The page content includes a table for user permissions, a 'Virtual Roots' section with instructions, and input fields for adding new virtual directories.

User	Home Directory	Read	Write	Execute	Server
Guest	NFLASHFTPROOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ADMIN	\	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

(If the user name is in red, the values in that row are only recommended values. Please edit as appropriate and click on "Update Users" for the values to take effect)

Submit

Virtual Roots

Use this section to add/delete virtual roots to the FTP server. Virtual roots allow you to map a physical directory to an directory with a different name. If the user has permissions to see virtual roots, these roots will appear as folders under the user's home directory. The virtual directory name cannot contain of the following characters: <>:"/ The directory path cannot contain any character from the previous list as well, but may include the backslash.

Virtual Directory Name: The name of the directory to display under the users home directory

Directory Path: Path to the physical directory

Delete
Check the virtual directories you would like to delete

<Enter alias for new virtual directory> <Enter physical path virtual directory>

Submit

Windows CE Version: (4.20) Build Version: (1088) SysVersion: (1088)
© 2000-2002 Microsoft Corporation. All rights reserved.

完成 近端內部網絡

4.7.4 Telnet Server

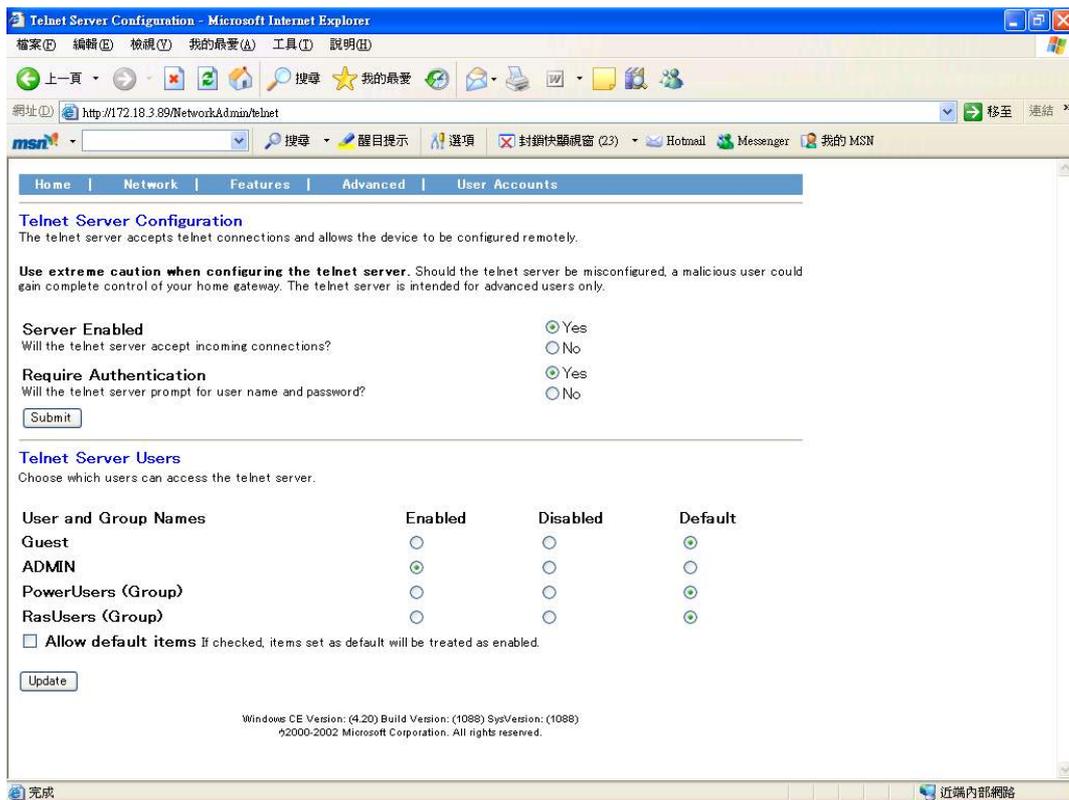
The telnet server accepts telnet connections and allows the ADAM-6501 to be configured remotely.

Telnet Server Configuration

- Server Enabled- Will the telnet server accept incoming connections?
- Require Authentication- Will the telnet server prompt for user name and password?

Telnet Server Users

Choose which users can access the telnet server.



Restart Network

Restart for network change to take effect. To make the changes you have made take effect immediately, please press "Restart Networking" button, and then the home gateway networking services will be restart.