

XtendLan

Ultra Thin Client

TC-401

TC-402



Users's Guide

CONTENT

1. OVERVIEW	3
1.1 HARDWARE SPECIFICATION	3
1.2 SOFTWARE OVERVIEW	4
1.3 HARDWARE OVERVIEW	5
1.4 NETWORK CONNECTION	7
2. INSTALLING THE SOFTWARE.....	8
2.1 INSTALLING NETPOINT	8
2.2 UNINSTALL NETPOINT	13
3. SETTING UP NETWORK CONFIGURATIONS	15
3.1 LOCAL NETWORK, CONNECTING BY STATIC IP ADDRESS.....	15
3.2 LOCAL NETWORK WITH DHCP SERVER	19
4. USING THE SOFTWARE	23
4.1 RUNNING NETPOINT MANAGEMENT CENTER.....	23
4.2 SOFTWARE SETTINGS FUNCTION	24
4.2.1 <i>Station</i>	24
4.2.2 <i>Refresh</i>	24
4.2.3 <i>List All</i>	25
4.2.4 <i>View Screen</i>	26
4.2.5 <i>Rename</i>	29
4.2.6 <i>Delete</i>	31
4.2.7 <i>Reset</i>	33
4.2.8 <i>Send Message</i>	35
4.2.9 <i>Help</i>	36
5. FAQ	37

1. Overview

Ultra thin clients TC-401, TC-402 allows connect many terminal to Windows based server. Users are connected over LAN (Ethernet) and each of them has own monitor, keyboard, mouse, simply complete desktop environment. Installation works exactly same as when user is connected directly to server and working on their desktop.

Supplied terminal services software divides the computer resources into independent sessions that give each user their own full PC experience. Best of all - you do not need to train IT staff and end users, because is very easy to setup and maintain and is compatible with standard PC applications.

1.1 Hardware specification

	TC-401	TC-402
System		
CPU	Onboard processor SoC, Fanless	
OS	Embedded OS, stored on integrated flash memory	
I/O	1 x PS/2 K/B, 1 x PS/2 Mouse	
USB		1 x USB 2.0 port Support for USB 1.1 and 2.0 Falsh memory devices
Display	VGA, 15-pin Dsub Connector 640x480, 800x600, 1024x768 (at 60 or 75 Hz refresh rate), 1280x1024 (at 63 Hz refresh rate) 16-bit color support. Support for 3D games or full screen home theater video applications is limited.	
Audio	Stereo output via speaker port, Line-out.	
LAN	Fast Ethernet 1 port RJ-45	
Mechanical & Environment		
Power Requirement	+5V @ 2A	
Operating Temperature	0 ~ 50 C	
Operating Humidity	0% - 90% relative humidity, non-condensing	
Size (W x H x D)	168x130x25mm	
Weight	150g	

1.2 Software overview

For using of TC-40x devices is necessary to install terminal server application on host PC station/server. This station is then called as “Terminal Server”. As Terminal server could act any computer which is supporting following operating systems:

Supported operating systems for host computer:

- Windows 2003 Server
- Windows 2000 Professional
- Windows XP-Professional
- Windows XP Home

Minimal hardware configuration:

- CPU performance equivalent Intel Pentium 2.4GHz, 512MB memory

Recommended host hardware:

- Up to 20 connected client is recommended CPU 2.4-3.2GHz
- Over 20 clients is recommended Xeon CPU or multi core CPU.
- Each client takes about 30MB of operating memory (at least). Is recommended to be installed on host over 1GB memory when over 10 clients is connected
- Load of communication protocol is not significant for host PC design. Decision should be based accordingly with planned applications and their needed computer resources (as memory, disk space etc.)

1.3 Hardware overview

Rear panel of TC-401, TC-402

Power button



LAN
10/100Base-TX
RJ-45

DC power jack

PS/2 mouse
green color

Audio line out

PS/2 keyboard

VGA port

Right panel of TC-402 only:

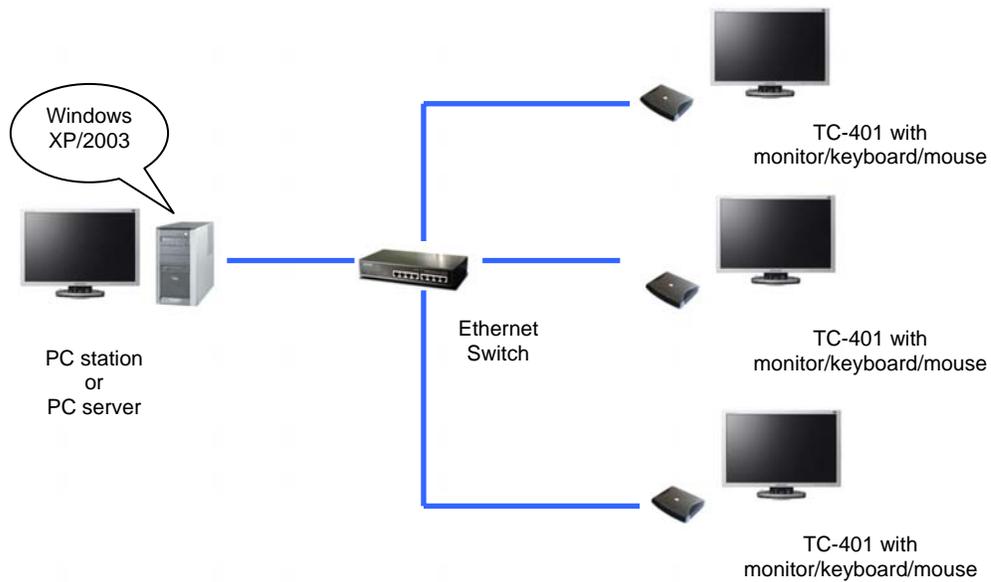


USB 2.0 port

1.4 Network connection

To use thin clients TC-40x is necessary to connect them into your local network. Interconnect TC-40x through your Ethernet switch or hub with PC station or server where will be installed Netpoint terminal application.

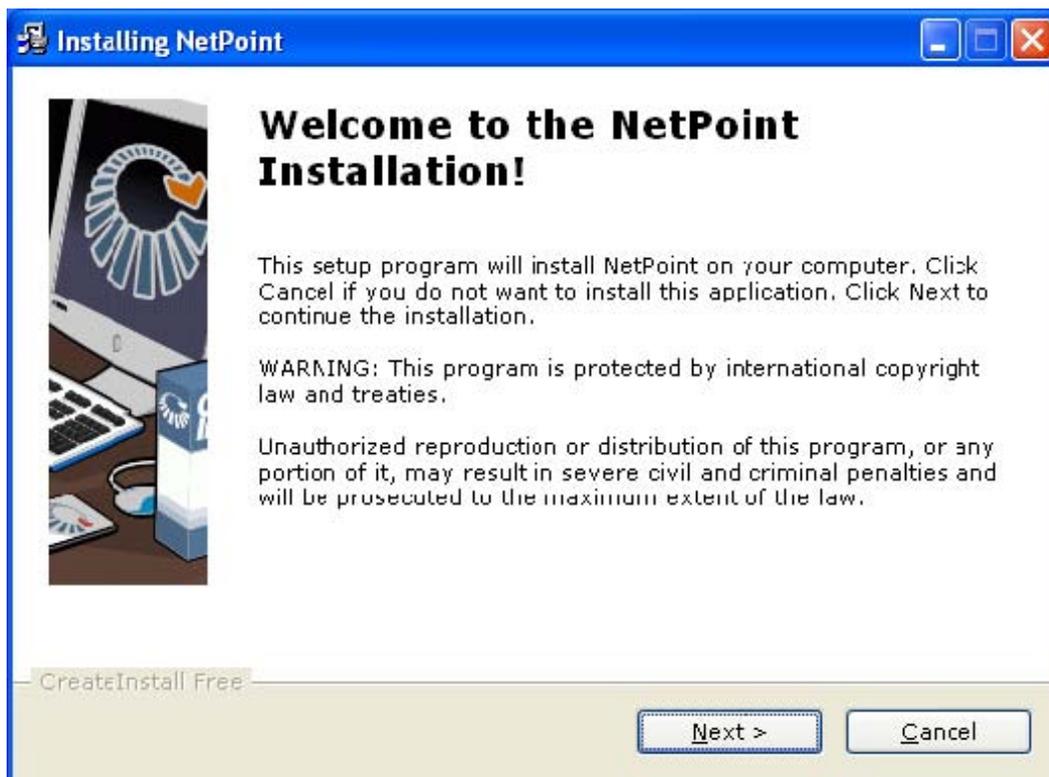
Please connect monitor, keyboard and mouse into their ports on TC-40x.



2. Installing the Software

2.1 Installing NetPoint

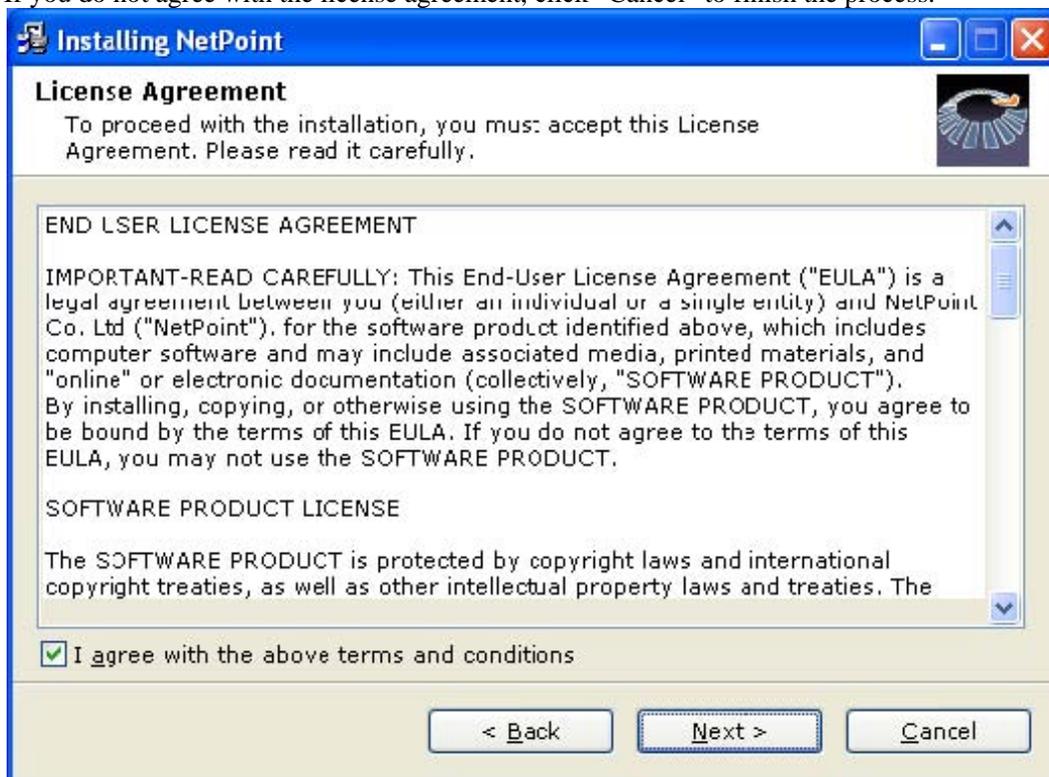
1. Turn on the Host PC and insert the Software Installation CD into the CD drive after your computer boots up.
2. The installation program will start automatically. If not, browse the CD, double click “setup.exe”.
3. Please make sure to DISABLE or UNINSTALL any Anti-Virus or Firewall software that may be running in the background. Security software of this type has been tested and known to interfere with the installation and operation of our product. Click “Next”.



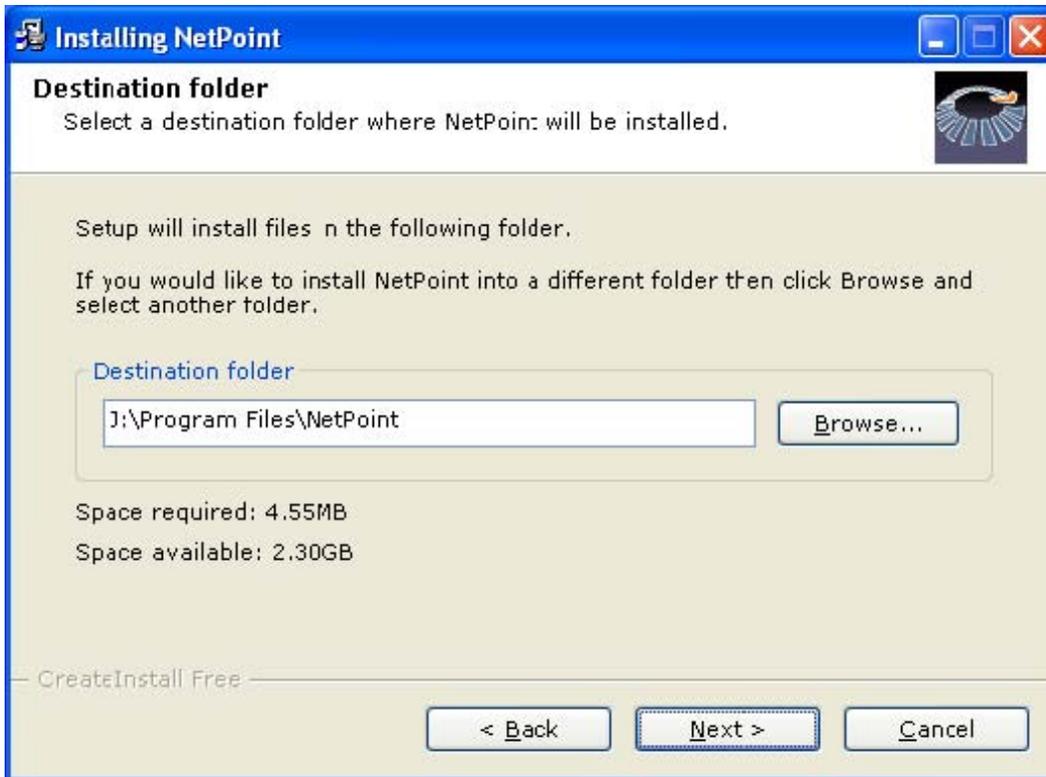
4. Read the contents of the readme file and click “Next”.



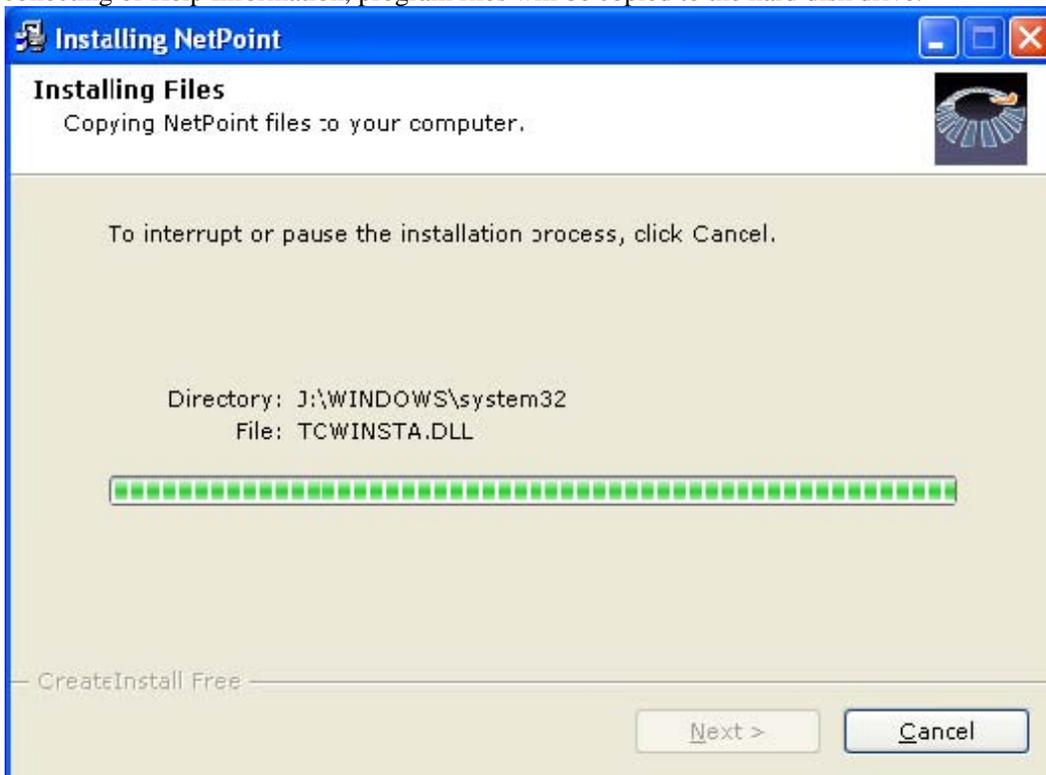
5. Once the license agreement window appears, check “I agree with the above terms and conditions” and click “Next”. If you do not agree with the license agreement, click “Cancel” to finish the process.

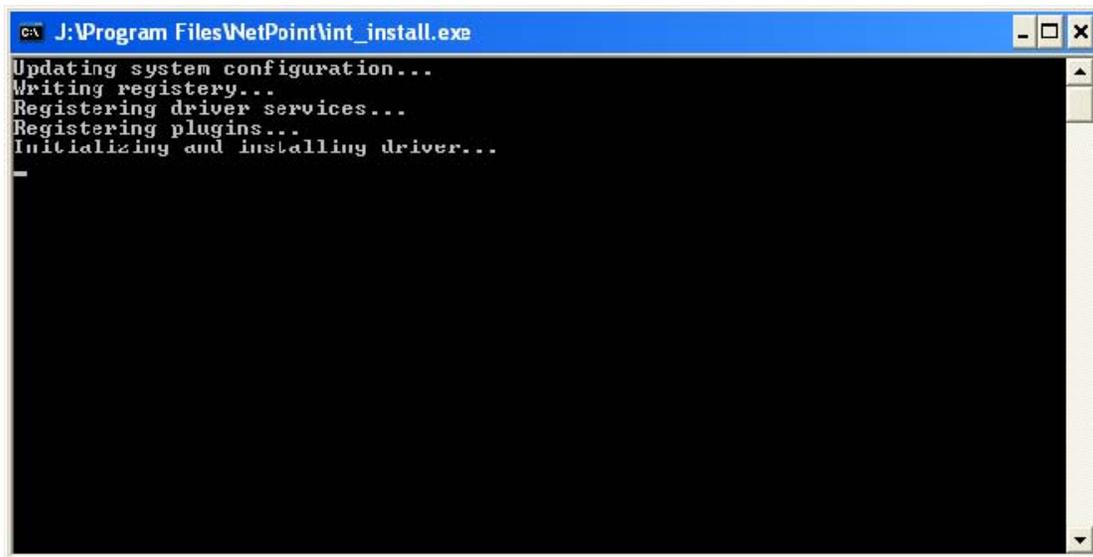


6. Select the installation default folder and click “Next”. The “program Files” is the default installation folder.



7. After collecting of Help Information, program files will be copied to the hard disk drive.





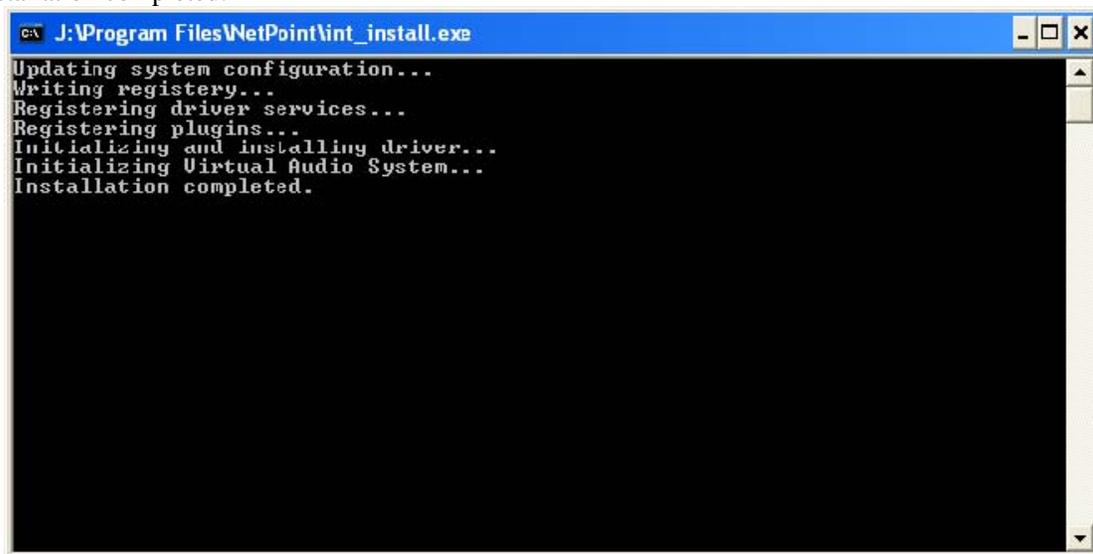
8. Hardware Installation, click “Continue Anyway”.



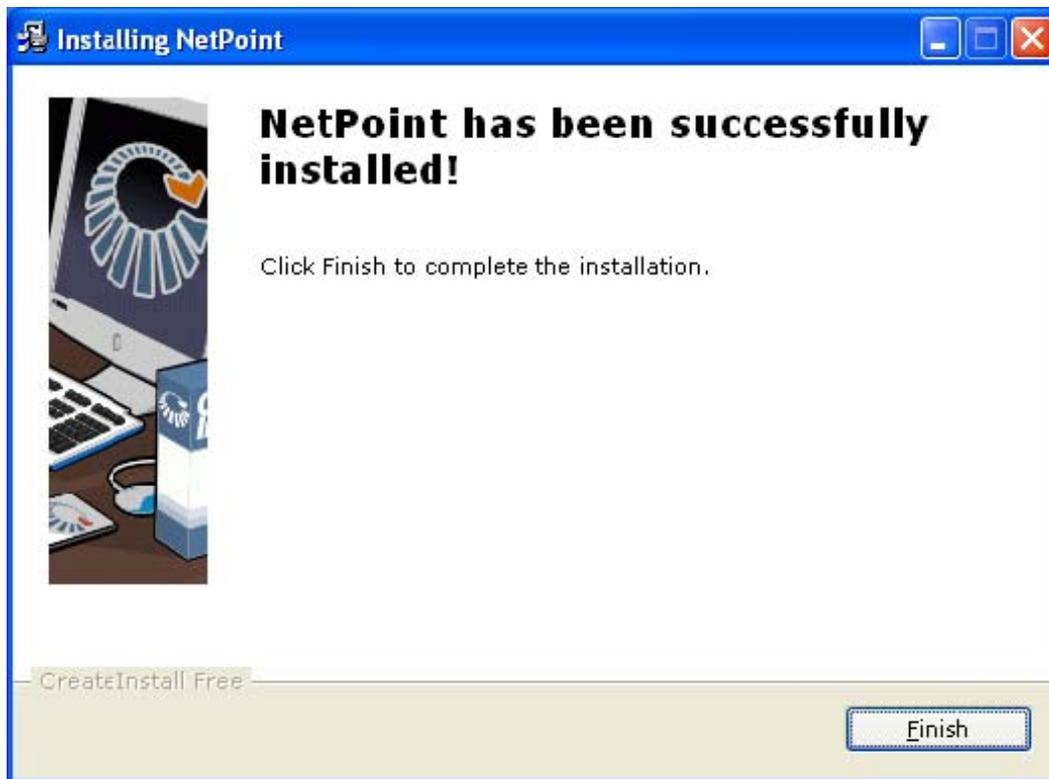
9. Hardware Installation, click “Continue Anyway”.



10. Installation completed.



11. NetPoint has been successfully installed! Click “Finish” to complete the installation.



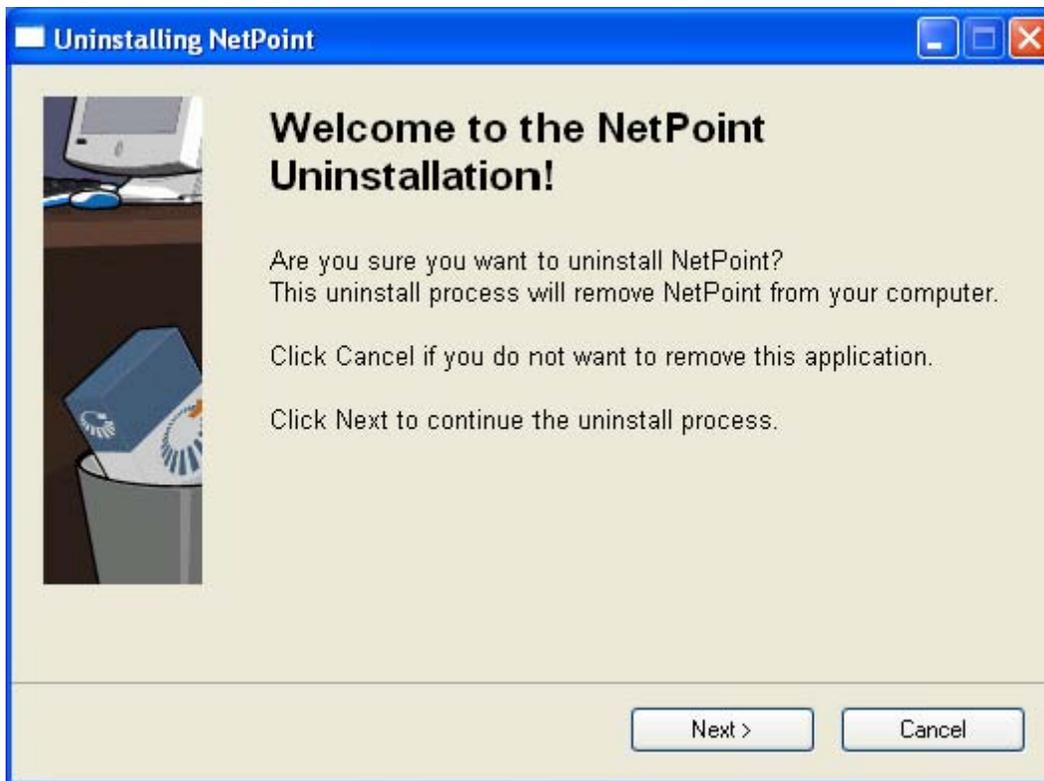
12. Click “Yes” to restart your computer now.



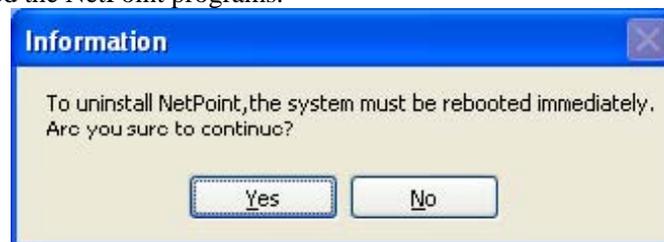
2.2 Uninstall Netpoint

To uninstall the software, follow these steps: 1. Click “Start”, click “All Programs”, click “NetPoint”, and then click “Uninstall”.

2. When NetPoint remove wizard window appears, click “Next”.



3. Click "Yes" to removed the NetPoint programs.



4. NetPoint is being deleted.

After the programs have been removed from your computer, Please restart your computer now.

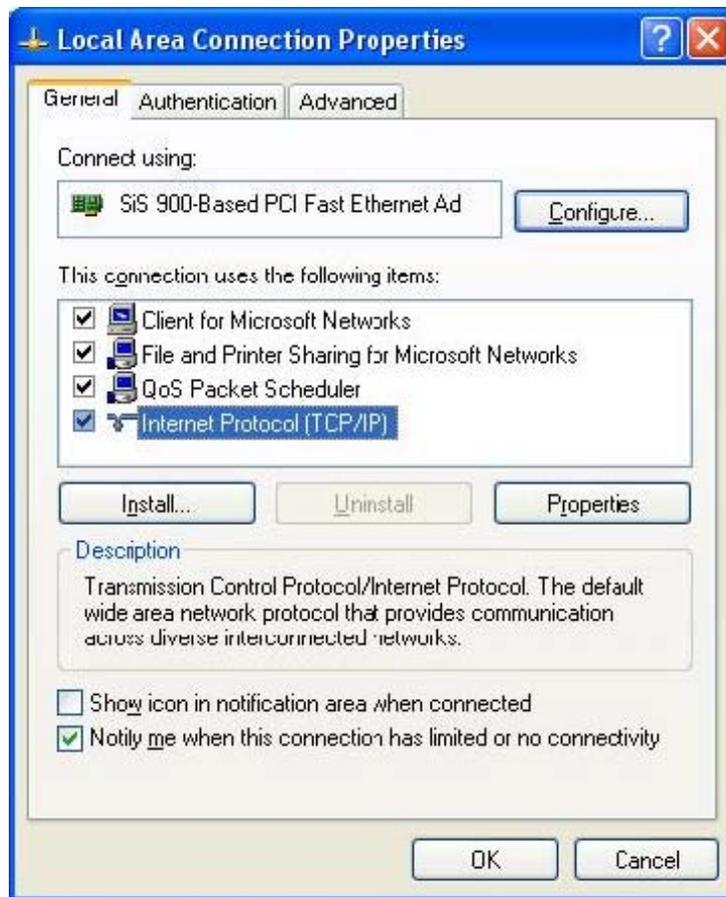
3. Setting up Network Configurations

If your computer is using Windows® 2000 or XP or 2000 server or server 2003 and has a network adapter, you have to configure the network to connect with any TC-40x series terminal(s). To configure your computer’s network configurations, please refer to the following:

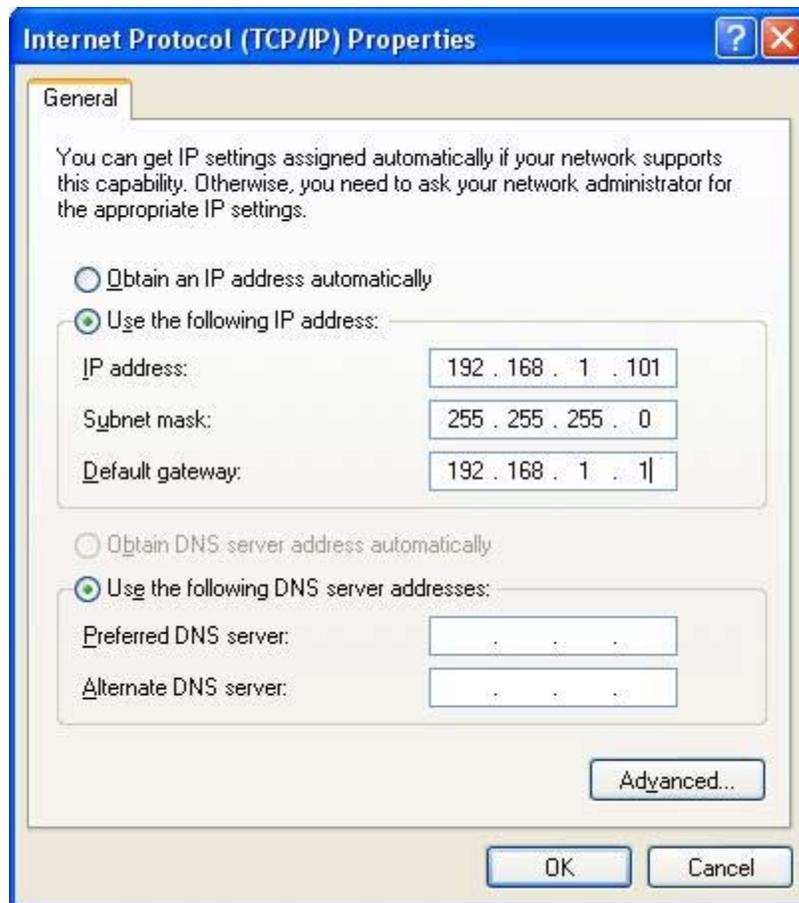
3.1 Local network, connecting by static IP address

To connect by using a switch, you have to set a static IP address on both the TC-40x series terminal and the Host PC. To configure an IP address as static, follow these steps:

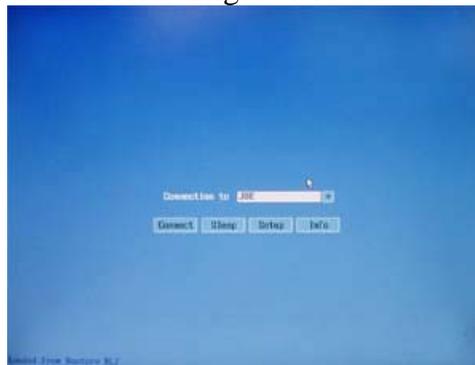
1. Click “Start” and click “Control Panel”. (In Windows® 2000, Click “Start”, click “Settings”, and then click “Control Panel”)
2. Click “Network and Internet Connections”, and then click “Network Connections”. (In Windows® 2000, double click “Network and Dial-up connections”)
3. Right click on the LAN adapter icon and select “Properties”. (In Windows® 2000, right click on the LAN adapter icon and select “Properties”)
4. Click “Internet Protocol (TCT/IP)”and click the “Properties”. (In Windows® 2000, click “Internet Protocol (TCT/IP)”and click the “Properties”)



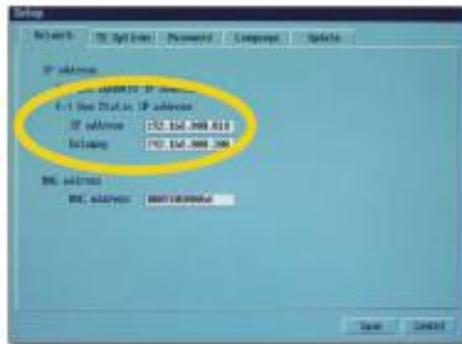
5. Check “Use the following IP address” and input the address of the IP address, subnet mask, and Default Gateway, and then click “OK”.



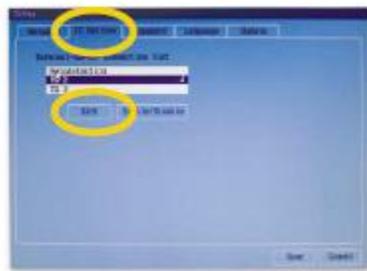
6. Turn on the TC-40x series terminal for configuration. Click the “Setup”.



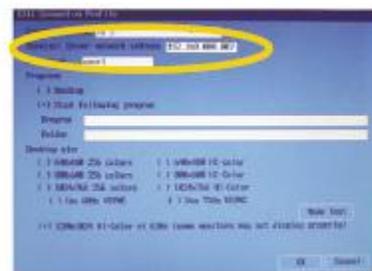
7. In the “Network” tab, check “Use Static IP address” and input the IP and Gateway address you want to use.



8. In the “TS Options” tab, select “TS 2” and click “Edit” then, input the IP address of the HOST PC on the Terminal Server Network address.



or



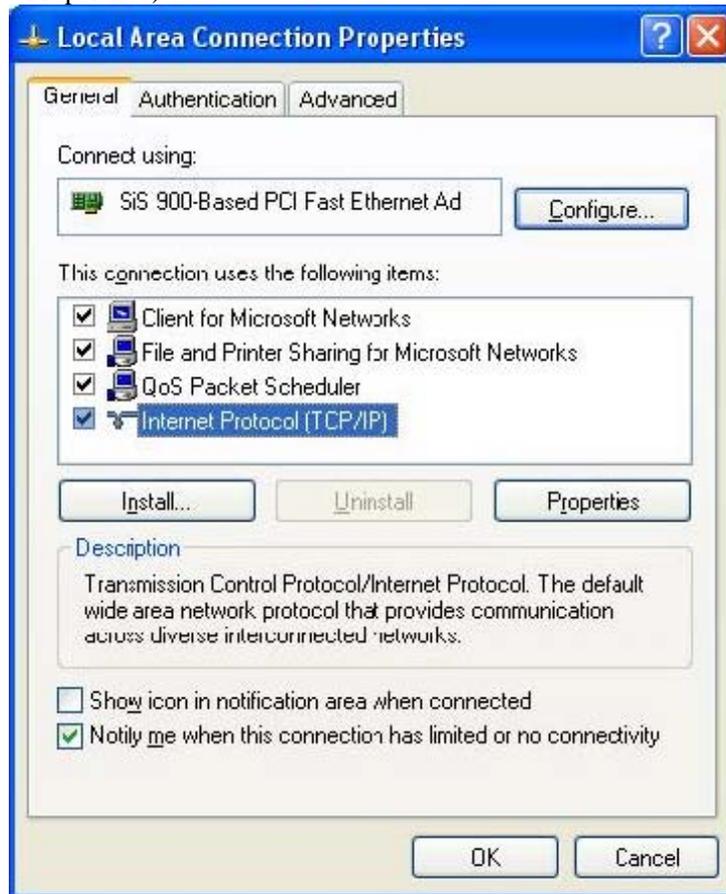
9. If you are finished with the settings, click “Save”. Click “Connect” (or try again).

10. Your TC-40x series terminal should be connected to the Host PC. You are now ready to use your TC-40x series terminal.

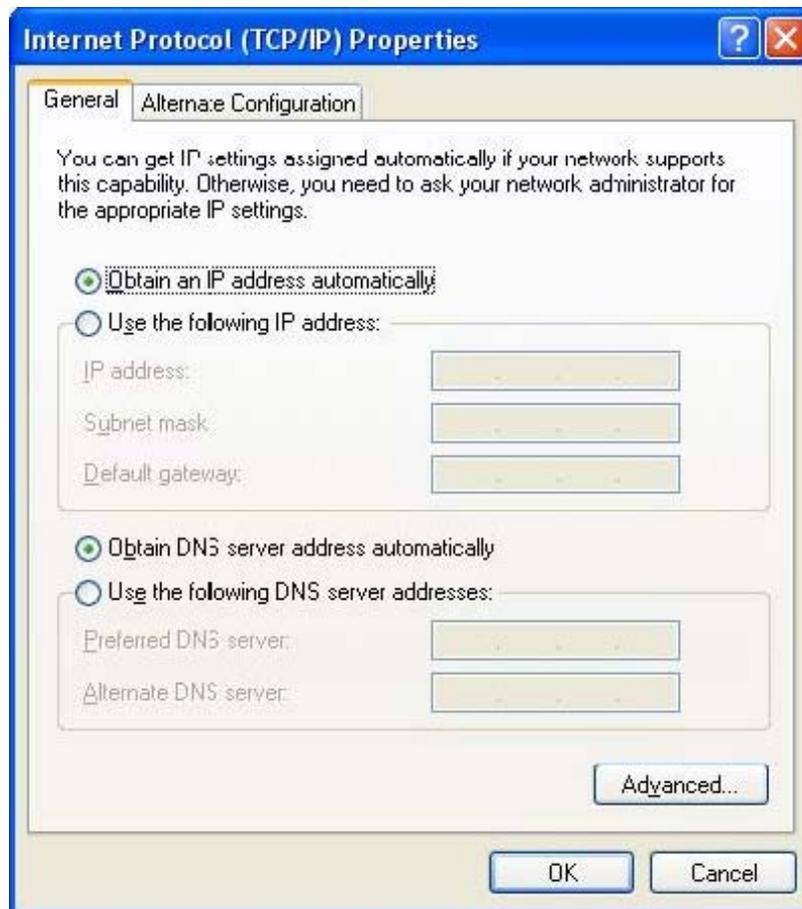
3.2 Local network with DHCP server

Typically if you use a Cable/DSL router which act as DHCP server, you can use dynamic IP addresses. If there is working as DHCP server Host PC then you can skip description of points 1.-5.

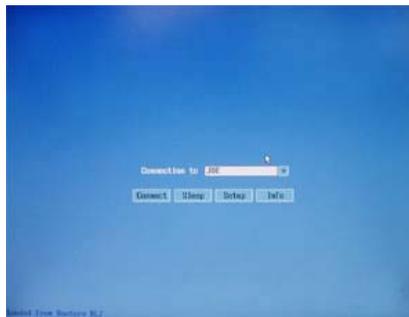
1. Click “Start” and click “Control Panel”. (In Windows® 2000, click “Start”, click “Settings”, and then click “Control Panel”)
2. Click “Network and Internet Connections”, and then click “Network Connections”. (In Windows® 2000, double click “Network and Dial-up Connections”)
3. Right click on the LAN adapter icon and select “properties”. (In Windows® 2000, right click on the LAN adapter icon and select “properties”)
4. Click “Internet Protocol (TCP/IP)” and click the “properties”. (In Windows® 2000, click “Internet Protocol (TCP/IP)” and click the “Properties”)



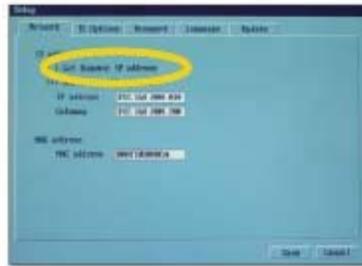
5. Check “Obtain an IP address automatically” and “Obtain DNS server address automatically,” and then click “OK”.



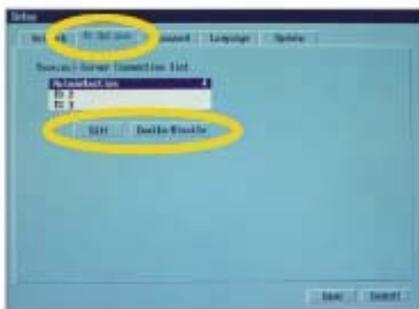
6 . Turn on the TC-40x series terminal, you will see following windows. For configuration settings click the “Setup”.



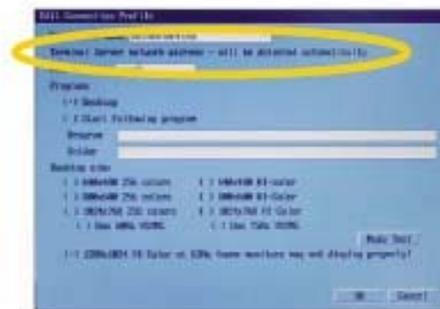
7. Viewing the monitor connected to the TC-40x series terminal, the Setup window will appear. In the “Network” tab, check “Get Dynamic IP address”.



8. In the “TS Options” tab, “Autodetect” would be activated as the default setting for automatic connection to the Host PC. If it is not connected properly, or if you want to run the “Fail-over” function, click the “Enable/Disable” after selecting. TS2 (or TS 3) and inputting the IP address.



or

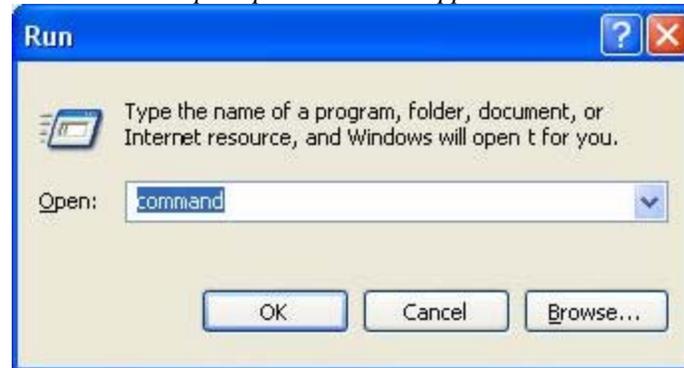


Note

You have to know the allocated IP address that the Host PC received automatically. You can see the IP address of the Host PC as follows:

1 Click “start” on the Host PC. Click “Run”.

2 Type “cmd” in the input box. The DOS prompt window will appear.



3 Type “ipconfig” in the DOS command line and press Enter. IP address, subnet mask, and Gateway that was allocated to the Host PC will be displayed on the screen.

```
c:\ D:\WINDOWS\system32\command.com
C:\>ipconfig
Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : private
    IP Address. . . . .               : 192.168.1.101
    Subnet Mask . . . . .             : 255.255.255.0
    Default Gateway . . . . .         : 192.168.1.1
C:\>
```

4 Input the displayed IP address into Terminal server network address.

9. If you finished the setting, click “Save”, Click “Connect”. (or Try Again)

10. Your TC-40x series terminal should be connected to the Host PC. You are now ready to use your TC-40x series terminal.

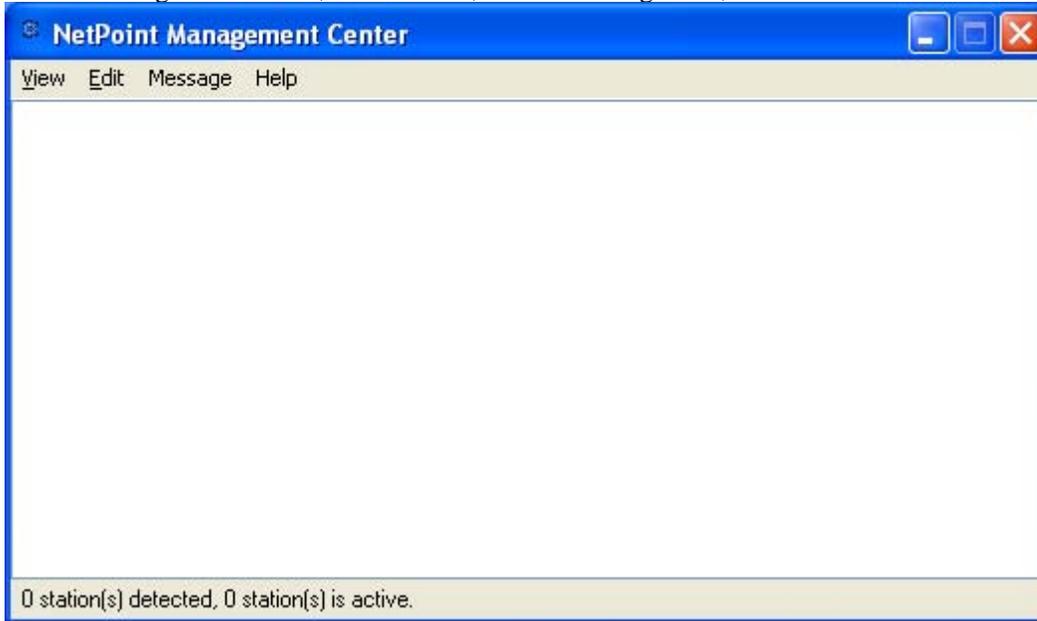
4. Using the Software

If you install the software, you can see the group and its program lists. To see the software group and lists, click “Start”, click “All Programs”, click “NetPoint Server”.

4.1 Running NetPoint Management Center

Using NetPoint Management Center you can control the TC-40x series terminal.

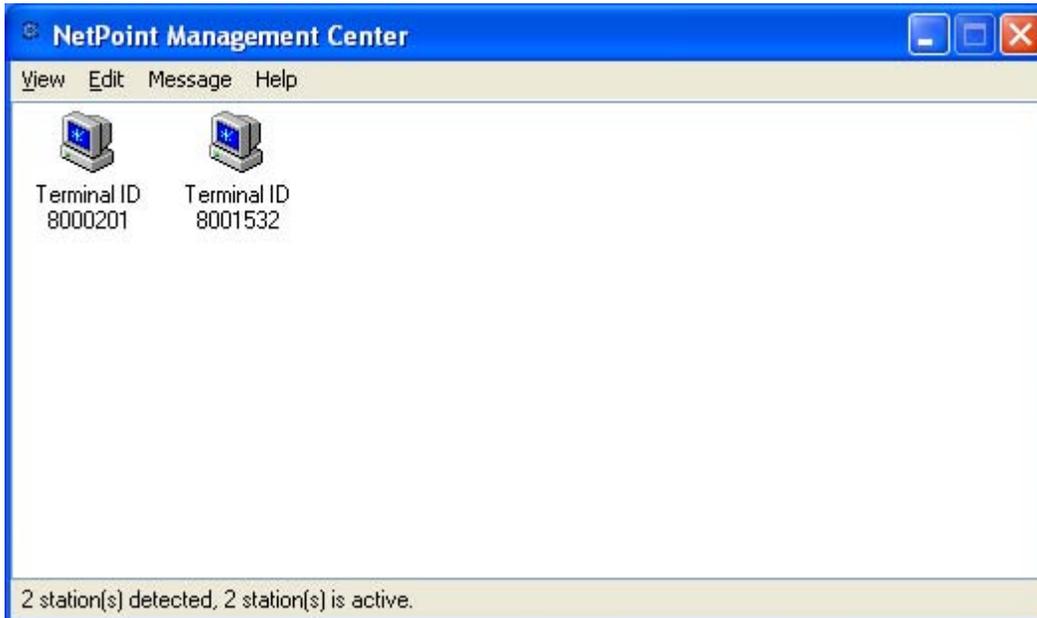
To run NetPoint Management Center, click “Start”, click “All Programs”, click “NetPoint Server”.



4.2 Software Settings Function

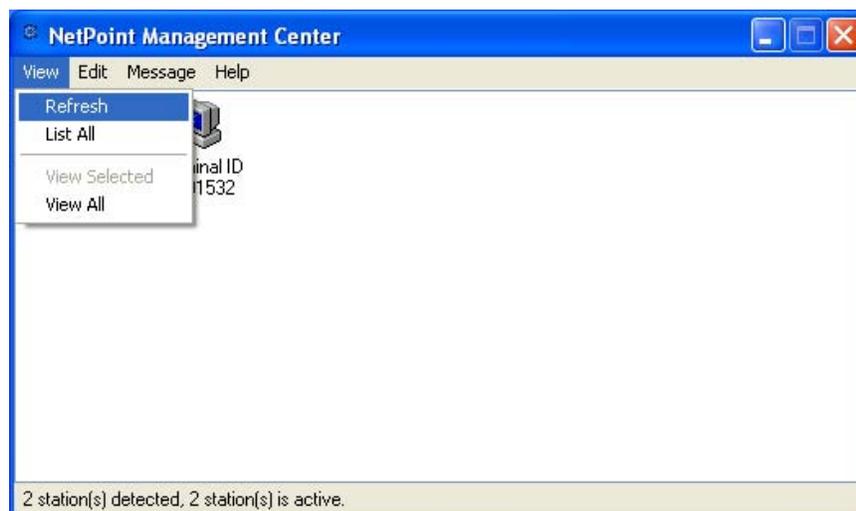
4.2.1 Station

You can see the status of the TC-40x series terminal when connected to the Host PC.



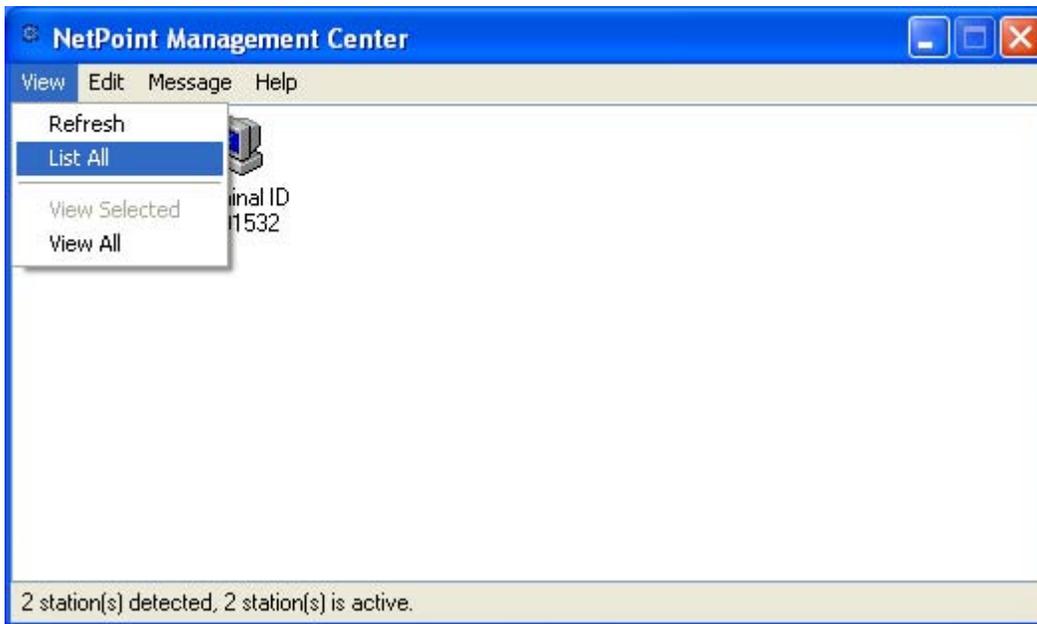
4.2.2 Refresh

Refresh the terminal of view screen.



4.2.3 List All

List all of the TC-40x series Terminal.

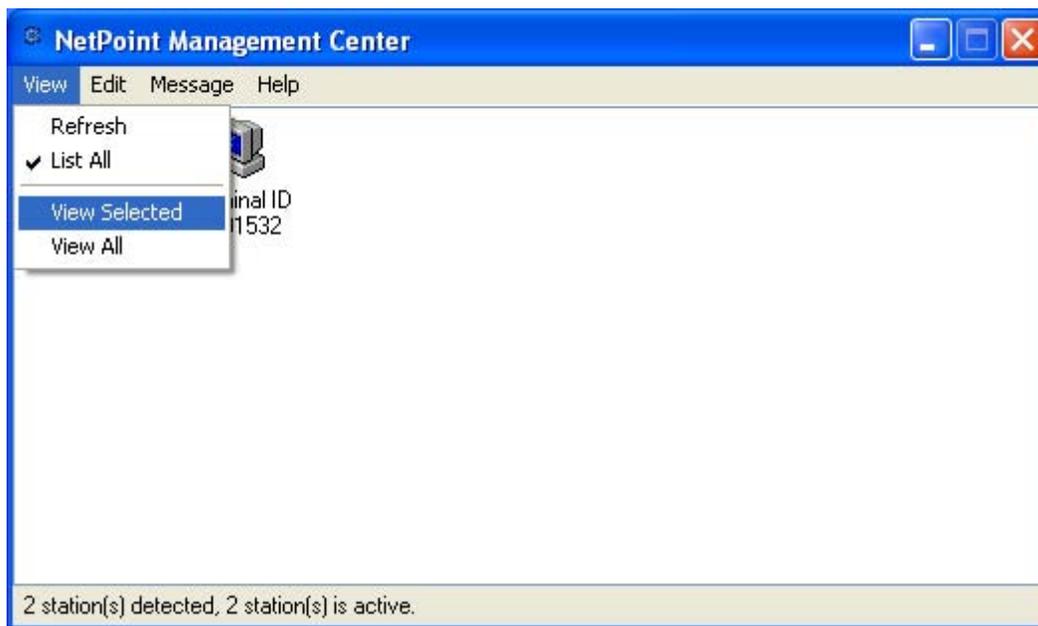


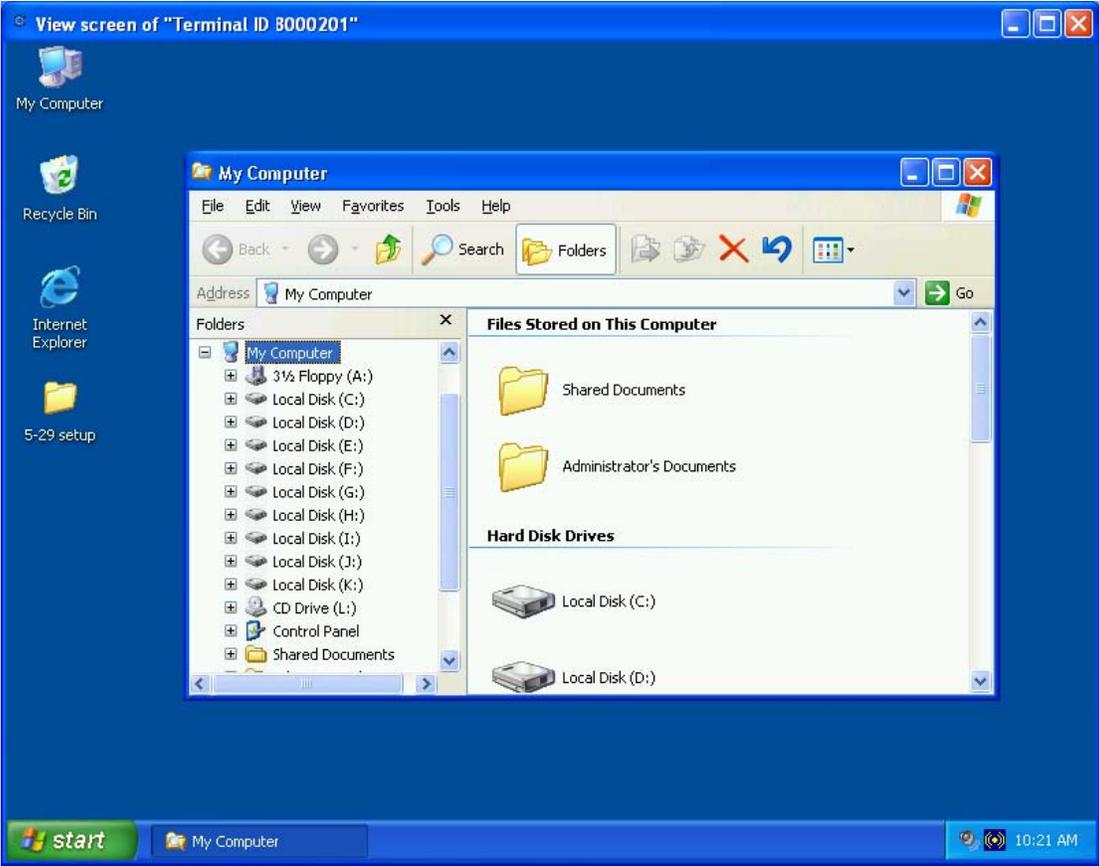
4.2.4 View Screen

Through the NetPoint Management Center you can view the screen of the active TC-40x series selected. Users must have Administrator authority to activate this function. Administrator can see selected client or view all client simultaneously on one screen.

View Selected

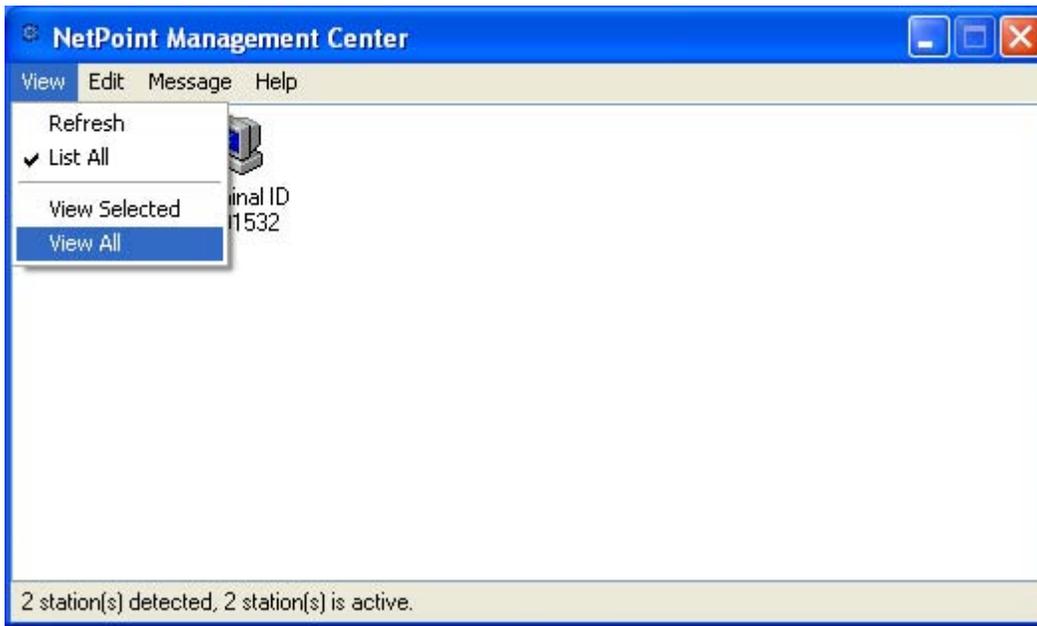
1. Click “View” on the menu bar from the NetPoint Management Center.
2. Click “View Selected” for monitoring TC-40x series(s).



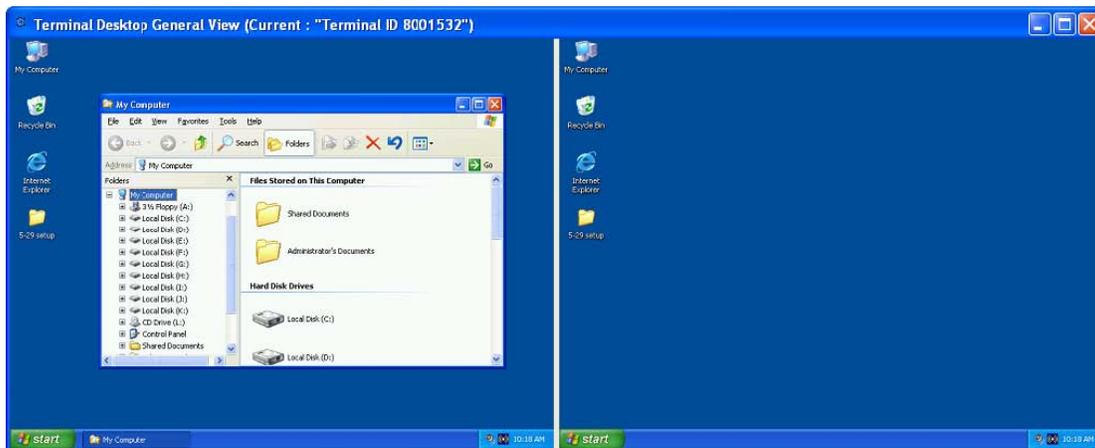


View All

1. Click “View” on the menu bar from the NetPoint Management Center.
2. Click “View All” for monitoring TC-40x series(s).

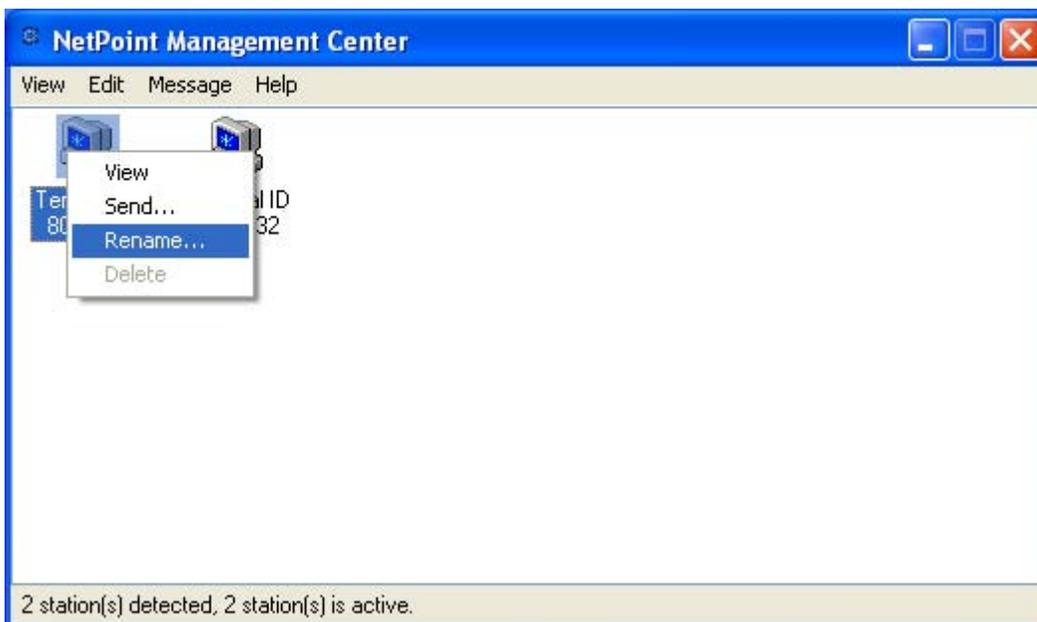
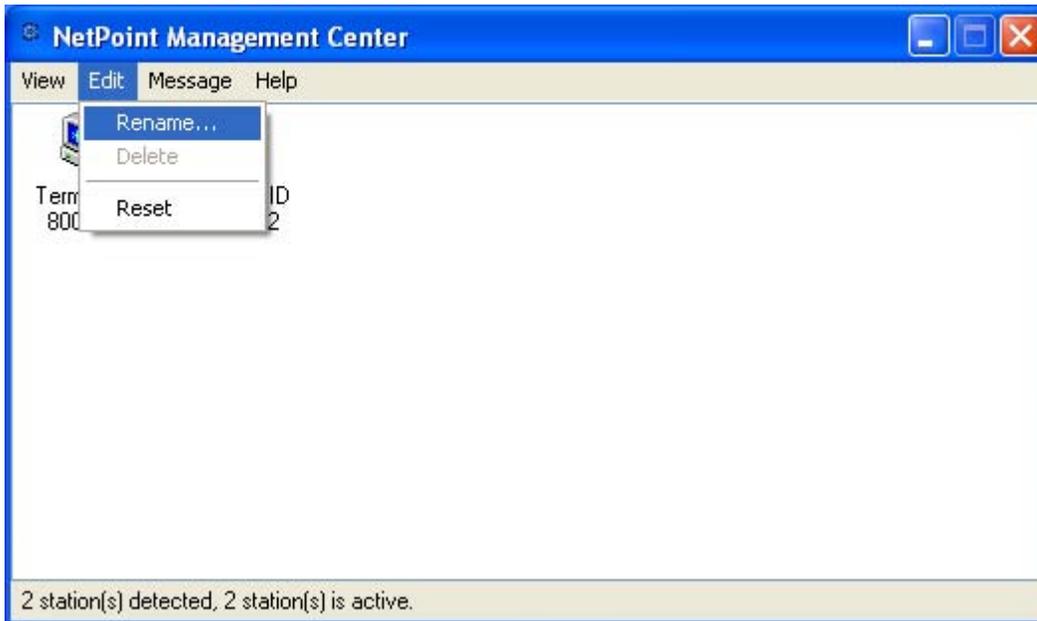


See all connected clients desktop:



4.2.5 Rename

Allow to rename connected terminal.





Before Rename



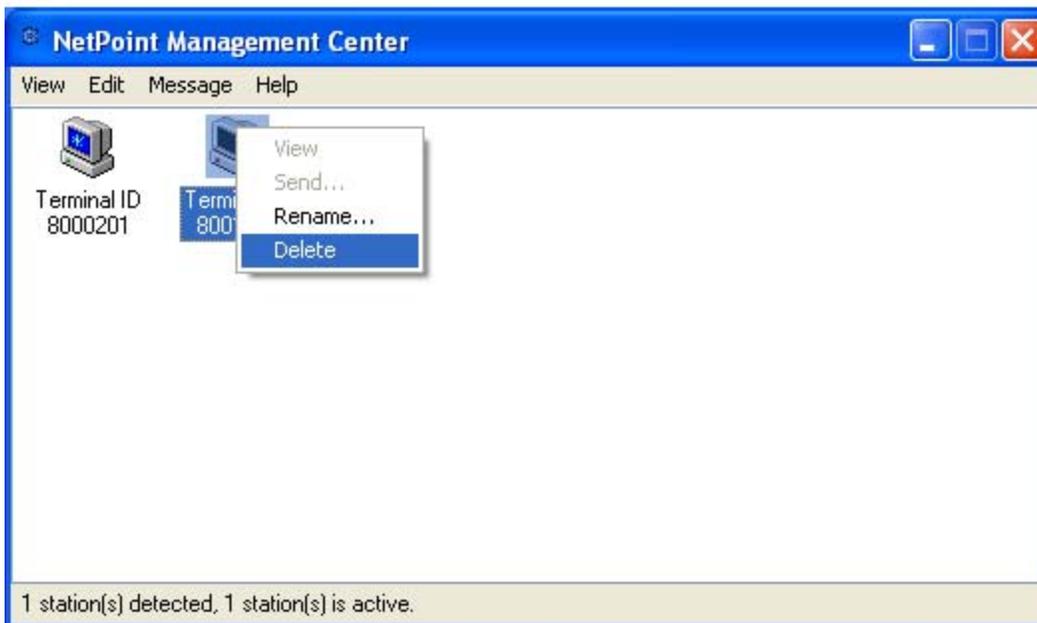
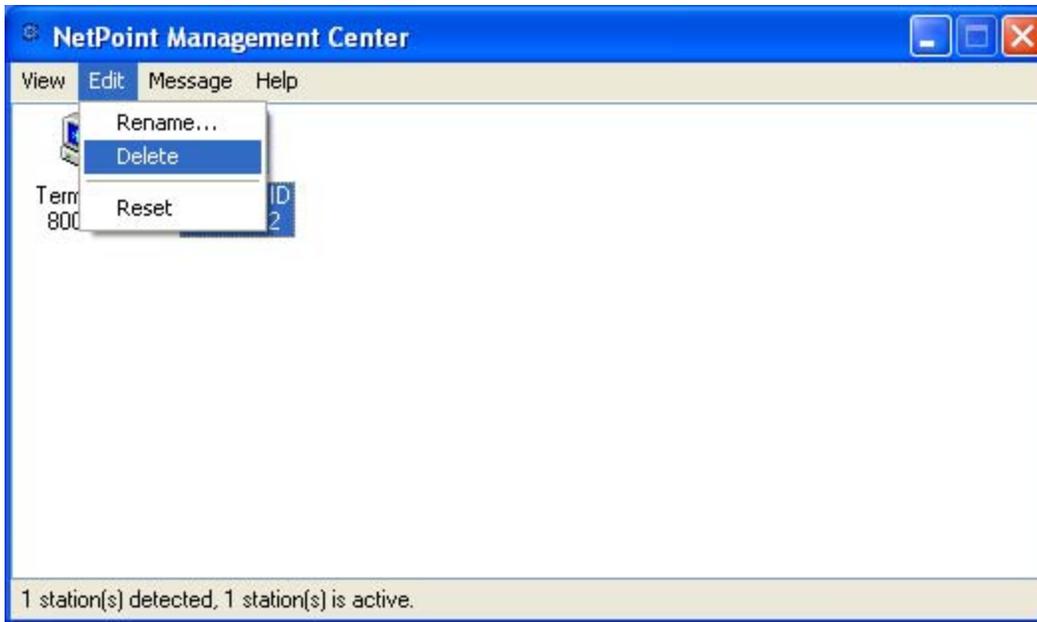
After Rename



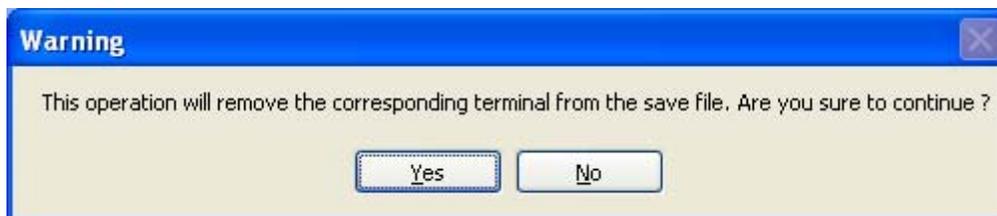
4.2.6. Delete

You can delete terminal, when it disconnected from Host PC in Local Network.

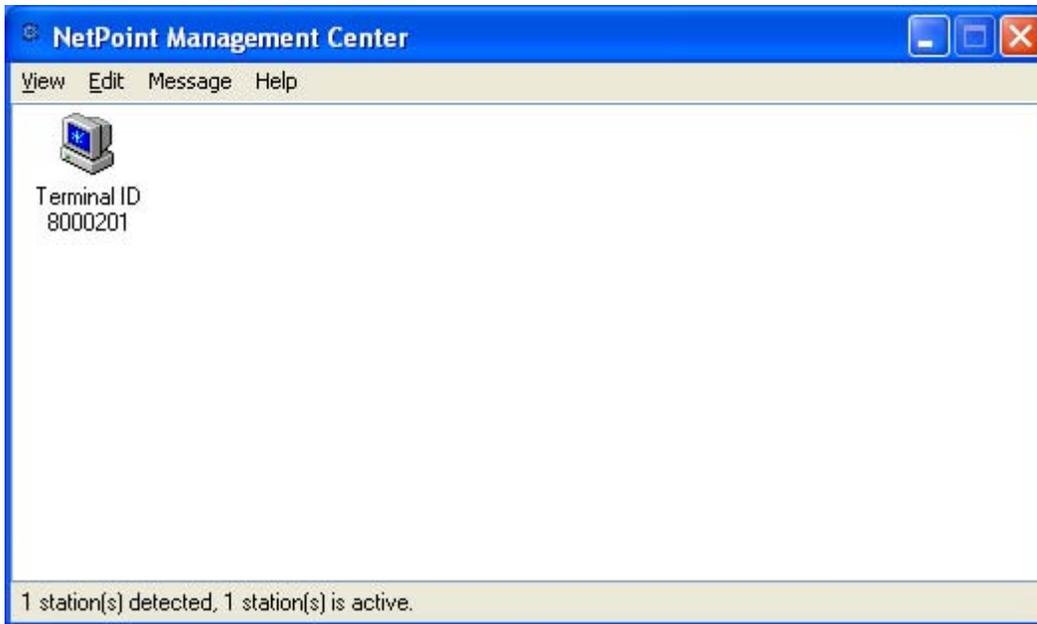




Click “Yes”

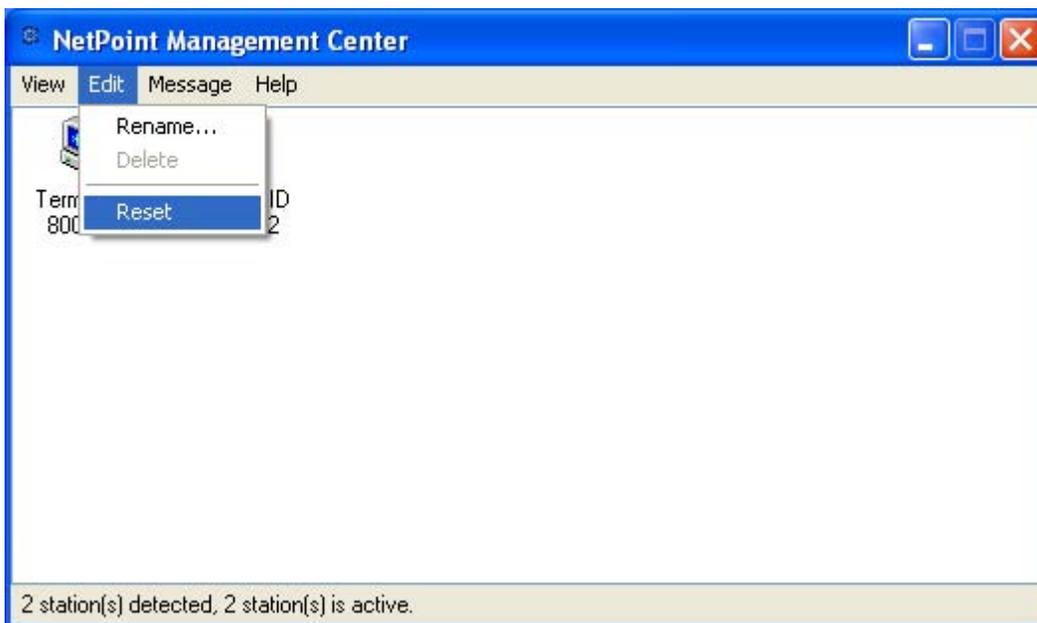


After Delete:

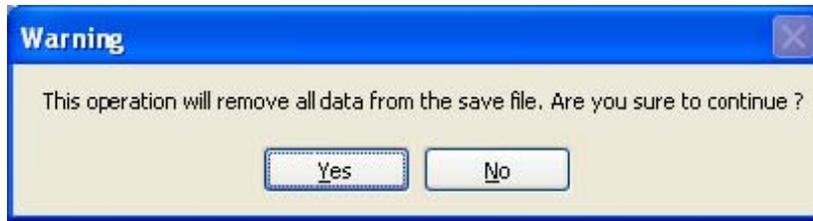


4.2.7. Reset

Restores the terminal to the original setup.



Click "Yes"



After Reset

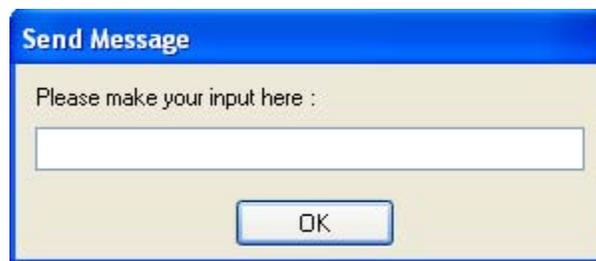
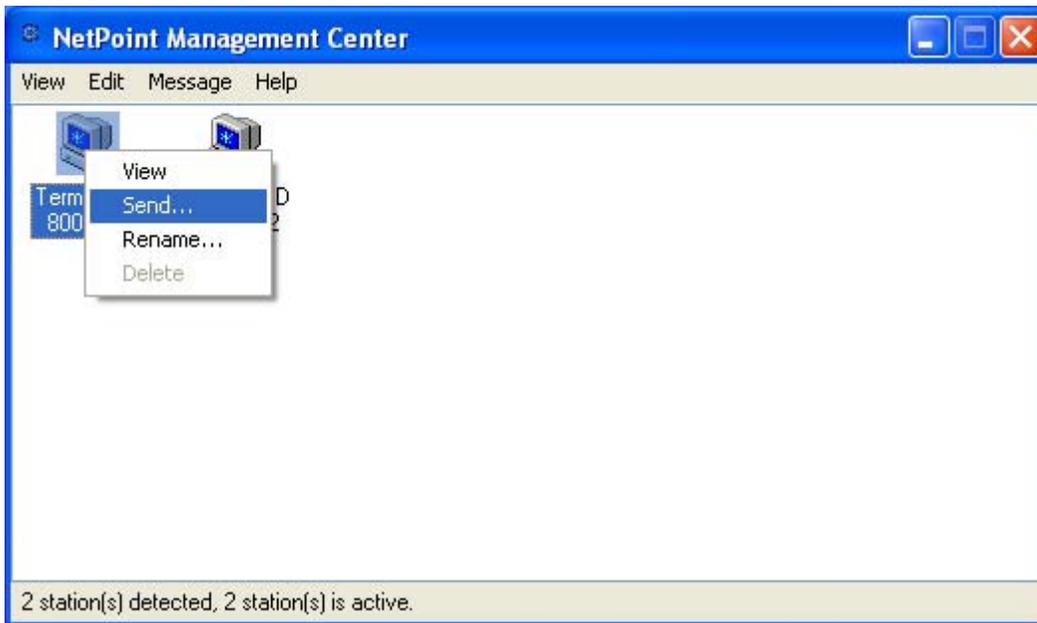


4.2.8 Send Message

This is an icon to send message from Host PC to TC-40x series terminal. (For sending messages, the user needs to have Administrative rights).

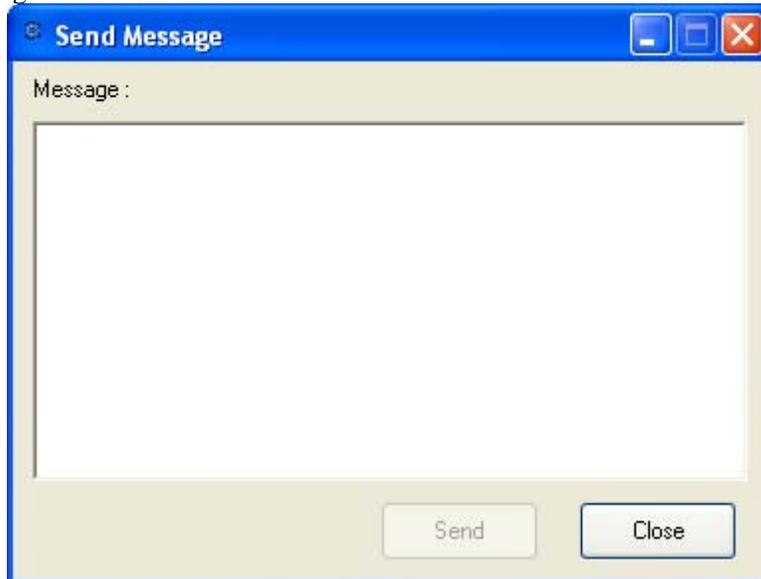
Send To One

Send message only to selected station.



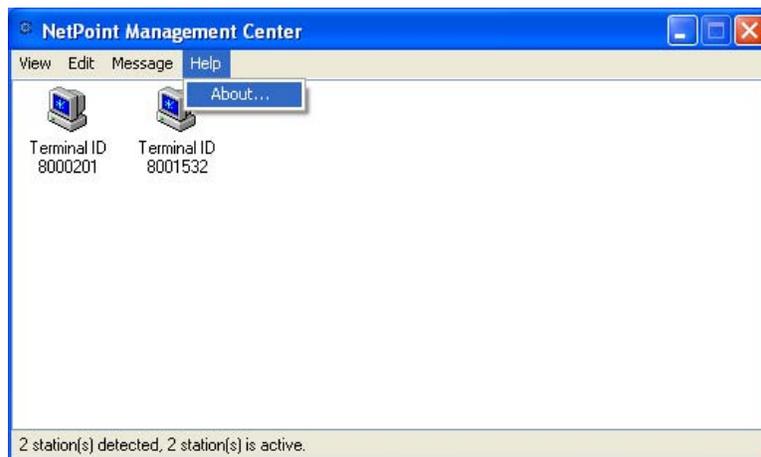
Send To All

Will send same message to all connected stations.



4.2.9. Help

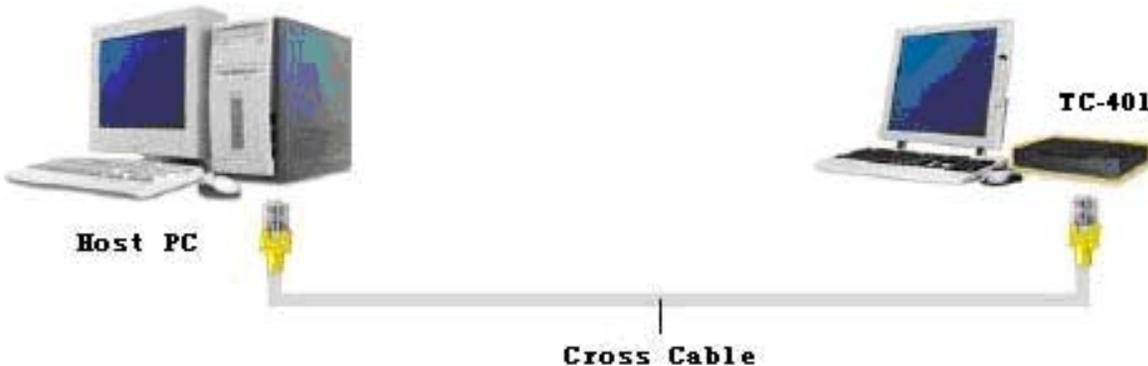
Shows info about the NetPoint Management Center



5. FAQ

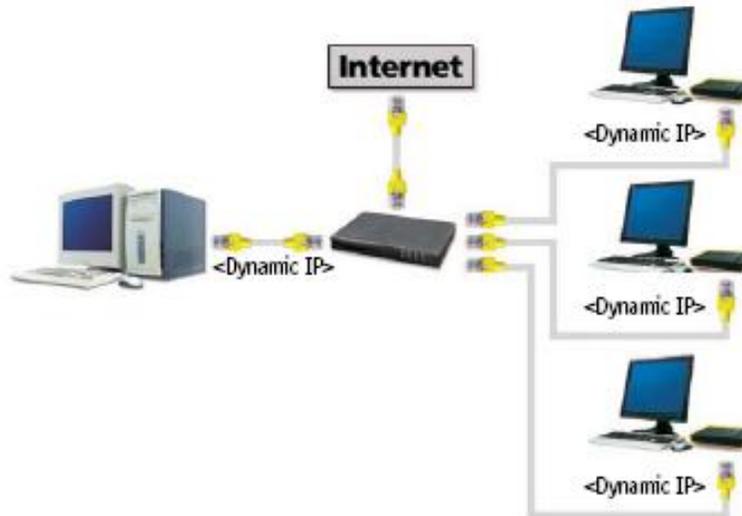
Q How do I connect the TC-40x series directly to the Host PC?

A Use a crossover cable to connect the TC-40x series terminal to the Host PC. You can only directly connect one TC-40x series to a Host PC by using a LAN adapter.



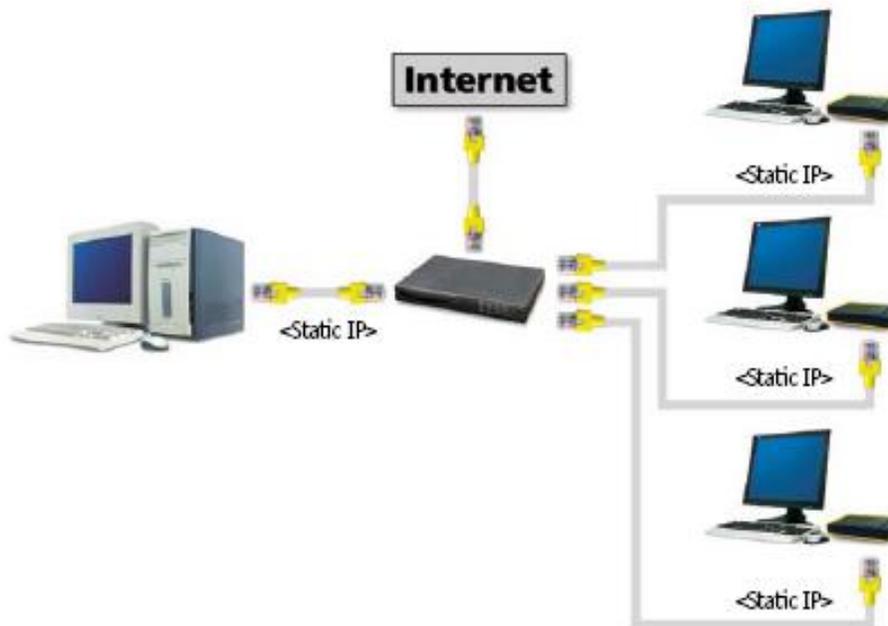
Q How do I use a dynamic IP address when the Host PC is connected to a router?

A A router allocates the IP address dynamically to the Host PCs and TC-40x series terminal(s). Users do not need to set the IP address. Set the network configuration to dynamic IP address in the set up window.



Q If a router/hub is connected to the Host PC, how do I connect an TC-40x series terminal to the Host PC with a static IP address?

A You have to allocate the static IP address of the Host PC and the TC-40x series to TC-40x series terminal(s) through a router/hub. (Contact your network manager to get the static IP address of the Host PC)



Q I am not connected and a screen displays the “DHCP server was not found” message.

A TC-40x series is set to get the IP address dynamically. If you enter the setup screen of the TC-40x series by pressing “Setup”, you can check in the “ Network” tab and make sure that the “Get Dynamic IP Address” option is selected. To use this option the router has to have DHCP server functionality activated. If you do not have a router, you have to install a Host PC that can allocate the DHCP addresses on your network. When you connect the TC-40x series directly to a Host PC, you can not use this option. In this case, select “Use Static IP address” and input IP address. Using IP router, check whether the DHCP function is activated, power is on, and LAN cable is connected.

Turn off the TC-40x series terminal and wait several seconds, and then turn it back on.

If you use a firewall program and certain outer protocols are blocked, you might not be able to connect to the TC-40x series terminal.

Q When I am connected to the Host PC by pressing the Connect button, the “Host unreachable...” message appears and I can’t connect.

A If there are no PCs on a network, this message appears. Check whether the Host PC is turned on. If it is turned on, check whether the IP address of Host PC and the Terminal sever IP address of TC-40x series are the same. You can check the IP address of the Host PC by running the ipconfig.exe command in the command line of the DOS prompt. Also, check the LAN cable connection. If you are using a hub or a router, check whether the hub or router is turned on and check the LAN cable connection. If the TC-40x series is directly connected to a Host PC and there is no problem with the network connection, refer to the following steps:

1. Click “Start” and click “Control Panel”.
2. Double click the “Network Connections” icon.
3. Right click the “Local Area Connection” icon and click “ Properties”.
4. Select the “Advanced” tab.
5. If the “Internet Connection Firewall” option is checked, click the “Settings”.
6. Remove the check for the “Remote Desktop” option in the “Advanced” tab of the “Advanced Settings” window.

If you use a certain firewall program that blocks the outer connection, you can’t use your TC-40x series terminal.

Turn off the TC-40x series terminal and wait several seconds, and then turn it on.

Check to make sure that any third party Antivirus, Firewall, or security related programs do not interfere with our software. Please disable these programs before the initial setup.

Q My mouse works but all of the other devices do not function properly. The NetPoint Management Center shows the station is operating well.

A This phenomenon occurs when the LAN cable is unplugged by accident or the router or switch is shut down. In this status, the controller of TC-40x series operates the mouse, so you feel as if the station is running. By the unstable power supplied to device is not stable or other reasons, this phenomenon occurs also.

Please check:

- Connection of the LAN cable.
- Operating status of the network device such as a router or switch.
- Stability of the power. (You can prevent by using UPS)

Q What games can I play?

A You can run only 2D games and Internet casual games such as a java and flash type.

Refer to the list below for what is not supported through TC-40x series:

- 3D games that require GPU or hardware accelerator.
- Single user game that requires the program CD.
- Runs at only one registered PC and checks the IP address of the system.

Q I can’t play the video in full screen mode with the TC-40x series.

A Our product shares the resources of the Host PC, so the memory and Host PC resources is limited and the performance speed is dependant on the Host PC’s specification. Playing the video in full screen mode takes a lot of system resources. We recommend playing the video in an appropriate screen size that does not reduce the system speed. TC-40x series is designed to run applications at the office such as a surfing the Internet, word processing, or working with spreadsheets.

Q Will this work in Windows®98?

A TC-40x series supports Windows®2000 Professional, Windows® XP Home Edition, Windows® XP Professional, Windows®2000 Server and Windows® Server 2003 (Standard Edition/Enterprise Edition).

Q I can’t connect the TC-40x series to the Host PC anymore.

A After you install patch files from Windows update, this can occur. Please uninstall the patch files or download and install the updated TC-40x series software from our FTP site. It might take some time for us to upload the updated software.

Q I want to upgrade the speed of the TC-40x series.

A Refer to the below items for an increase in the speed:

- Use a CPU which utilizes Hyper-Threading technologies and large L2 Cache memory size.
- Install more RAM.
- Purchase a new hard disk drive with faster access speeds. (fast rpm)
- Add more LAN adapters when multiple TC-40x series are connected through the switch.
- Reduce the number of TC-40x to Host PC by adding more Host PCs to connect.

Q In TC-40x series, message of “No Terminal Server found or not all services initialized yet, please click on the connection list and try it again.” appears.

A This message appears when there exists no Host PC with NetPoint installed in the network currently connected. Check if NetPoint is installed in Host PC or Host PC with NetPoint installed is connected to the network.

Q Connection stops while using TC-40x series and message of “Connection was closed but your data is not lost and applications still run at server side. Please connect Terminal Server later” appears.

A This message appears when connection stops due to problems or abnormality occurred in Host PC or network equipment. Check Host PC or network equipment when this message appears. Unless Host PC is rebooted, existing data in the Host PC may be used as is.

Q TC-40x series can not be connected even after program installation.

A This can happen in one of the following cases.

LAN cable is not connected to the Host PC with program installed. → Connect LAN cable to Host PC.

LAN cable is not connected to TC-40x series → Connect LAN cable to TC-40x series.

LAN cables are connected to both Host PC and TC-40x series → Verify IP settings for both Host PC and TC-40x series. (Refer to Network setting of the user’s guide)

Q Connection stops after automatic update of host PC

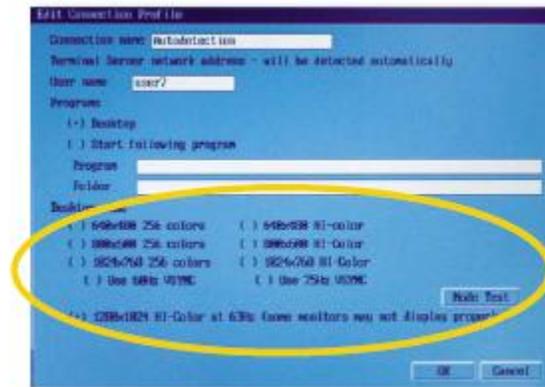
A Windows regularly checks for important updates and install them for you. If automatic update in the “Security Center” of “Control Panel” is selected, update will be automatically downloaded at selected day and time without asking user. This could happen since security update files are related with NetPoint, and therefore, automatic update should not be selected by clicking “Notify me but don’t automatically download or install them” instead. NetPoint updates for new version within 3 to 7 days so that users do not have any problem in using TC-40x series.

Q Status of serial number appears as “Expired” and TC-40x series can not be connected.

A This happens when user changed Host PC’s system date to the date earlier than the date NetPoint is installed. Change Host PC’s system date to the current date.

Q I have changed screen resolution setting in Windows, however, resolution changes after log off and on again.

A TC-40x series itself has ability to set screen resolution. In the initial screen of TC-40x series, select “Setup” → “TS Options” → “Edit” and screen same as the figure shown above appears.(resolution in the figure may vary depending on the product) Resolution selected in this way becomes the basis when logging on Windows and even if user sets different resolution in Windows, resolution set in TC-40x series will override when Windows is logoff and on again. Therefore, resolution user wants should be set in TC-40x series. Click “Save” after selecting desired resolution.



Q Can I have the user’s name appear when logging on TC-40x series?

A Yes, you can. In the initial screen of TC-40x series, select “setup” → “TS Options” → “Edit” and screen same as the figure appears. Name same as the one entered in the “User name” will appear on Windows logon screen. Only English is supported and password can not be set on the Windows logon screen.

