



Installation and Configuration Guide

NCD ThinPATH Connect, Version 2.0

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Revisions

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CHAPTER 1

About This Guide

NCD ThinPATH Connect extends the capabilities of the NCD ThinSTAR Windows-based terminal. It provides terminal emulations that enable users to run legacy applications on mainframe hosts.

Audience

This guide is intended for users and system administrators who install ThinPATH Connect software and for those who define and use connections.

Organization

The following chapters explain how to install, configure, and use NCD ThinPATH Connect.

Chapter 1: About This Guide

Describes the contents of this manual, text conventions used in it, and related documents.

Chapter 2: About NCD ThinPATH Connect

Describes the product and its requirements.

Chapter 3: Installing NCD ThinPATH Connect

Explains how to install NCD ThinPATH Connect.

Chapter 4: Configuring NCD ThinPATH Connect Connections on ThinSTAR Terminals

Explains how to add emulation connections and configure session properties that govern NCD ThinPATH Connect emulation sessions.

Chapter 5: Deploying Connections Through ThinPATH Manager

Describes connections and sessions and explains how to use them. For example, it explains how to stop and restart emulation connections during an emulation session and how to switch from one connection to another.

Chapter 6: Using Emulation Sessions and Connections

Explains how to use emulation sessions on ThinSTAR terminals and how to use ThinPATH Connect connections to remote hosts.

Glossary

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Text Conventions

This guide uses these text conventions:

>	Indicates movement through menu options, for example: Configure > X Server > Fonts
Bold	Indicates a directory, file, screen element, command name, or key to be pressed. For example: c:\Program Files\ThinPATH Connect
Bold monospace	Indicates user input.
Monospace	Indicates information that displays on the screen. For example, the date command displays: Monday Dec 20 03:05:12 PTD 1999
<i>Italic</i>	Indicates a variable for which you can substitute one or more parameter values, group names, or file names. For example: <i>IP_Address Host_Name</i>
[]	Indicates command options. Options are separated by vertical bars.

Related Documentation

In addition to this document, NCD ThinPATH Connect documentation includes online help for administrators and a quick reference guide for users as listed in the table that follows.

The online help files for the terminal emulation product and the client options are installed on your NT server. The files are also available on the distribution CD in PDF format so that you can print them as complete documents for reference.

This table lists documents that provide detailed information on topics related to ThinPATH Connect.

For information on . . .	See . . .
Late-breaking facts about ThinPATH Connect	<i>NCD ThinPATH Connect Release Notes</i>
Installing ThinPATH Connect	<i>NCD ThinPATH Connect Installation and Configuration Guide</i>
User information for ThinPATH Connect	<i>NCD ThinPATH Connect Quick Reference Guide</i>
Information about menus and fields in ThinPATH Connect	Online Help and Printable Online Help Files: <ul style="list-style-type: none">■ <i>Terminal Emulation Printable Online Help</i>■ <i>AT&T 4425 Client Option Printable Online Help</i>■ <i>IBM 3270 and 5250 Client Option Printable Online Help</i>■ <i>HP700/94 Client Option Printable Online Help</i>■ <i>AT&T 4425 Client Option Printable Online Help</i>
Basic information about connections	NCD ThinSTAR documentation
Administering an NCD ThinSTAR, including using the ThinSTAR Connection Manager and Terminal Properties	<i>NCD ThinSTAR System Administrator's Guide</i>
Using an NCD ThinSTAR	<i>NCD ThinSTAR User's Guide</i>
ThinSTAR Management Service (TMS)	<i>What's This?</i> on-line help built into the program

CHAPTER 2

About NCD ThinPATH Connect

NCD ThinPATH Connect software extends the capabilities of the NCD ThinSTAR Windows-based terminal so that users can run both legacy applications and Windows-based applications from one desktop.

The NCD ThinSTAR is a Windows-based terminal that lets users run Windows applications installed on a Microsoft Windows NT Server 4.0, Terminal Server Edition via a Microsoft Terminal Server (RDP) client. NCD ThinPATH Connect software provides direct access from an NCD ThinSTAR to legacy systems through Telnet connections.

Terminal Emulation

Large mainframes and bulletin board systems (BBS) all support certain types of terminals. Users can connect to them only if they have a supported terminal or can emulate a supported terminal.

Terminal emulations for NCD ThinSTAR users who want to connect to these systems are included in NCD ThinPATH Connect 2.0.

A terminal emulator Keyboard Editor, which also operates on the NCD ThinSTAR, is included in the NCD ThinPATH Connect package.

Capabilities

NCD ThinPATH Connect provides capabilities for:

- Adding a connection and specifying its emulation properties
- Mapping NCD ThinSTAR keys to the specifications of other terminals
- Starting a session that connects to a remote host or bulletin board service (BBS)
- Accessing these types of hosts through TCP/IP:
 - IBM (3270 and 5250)
 - Tandem
 - DEC
 - HP
 - AT&T and other Unix-based hosts
- Starting multiple connections (depending on the NCD ThinSTAR terminal's resources) and switching between them.

New Features in Version 2.0

Feature	Explanation
Local printing support	HP PCL compatible printing support is available using the parallel port on the terminal.
Hotspots	<p>Hotspots are characters that are highlighted in the session window. You can click on a hotspot in a session to:</p> <ul style="list-style-type: none"> ■ Perform a terminal function ■ Send a string ■ Perform a menu option.
Macro support	These are brief macros you can create for login prompts, such as usernames and passwords, and other text strings.
Direct serial connection type	A connector that allows you to connect the serial port of a ThinPATH terminal to another device.
Character translation	This translates the binary code of a character from the remote system to the proper binary code for the character on the terminal so the correct character is displayed on the session window.
Full screen terminal option	Forces the screen to simulate the appearance of a dumb terminal. This allows administrators to control which Windows GUI elements are displayed to end users.
Attribute Mapping	Allows you to differentiate between the character and the field attributes (for example, bold or underlined) that are defined for it on the terminal.

CHAPTER 3

Installing NCD ThinPATH Connect

This chapter explains how to install NCD ThinPATH Connect on Microsoft Windows NT 4.0 servers for deployment to NCD ThinSTAR terminals.

NT Server Requirements

To install ThinPATH Connect 2.0 on a Microsoft Windows NT server, you must have:

- Administrator privileges.
- Microsoft Windows NT 4.0 or later operating system installed.
- NCD ThinSTAR Management Service (TMS) software, Version 2.0 or later (order code TSW) installed.
- A valid license key for NCD ThinPATH Connect 2.0.
- Sufficient disk space (the software requires about 10 Mb).

Terminal Requirements

To use ThinPATH Connect 2.0 on an NCD ThinSTAR Windows-based terminal, the terminal must have:

- At least 8 MB of RAM.
- ThinSTAR operating system 2.0 or later installed.
- A network or direct serial connection to a Windows NT 4.0 server that has Windows NT 4.0 or later and TMS version 2.0 or later software installed.

Installing NCD ThinPATH Connect

The installation of NCD ThinPATH Connect requires a Microsoft Windows NT Server with the NCD ThinSTAR Management Service (TMS) software installed and running. If you want to deploy connections using NCD ThinPATH Manager, you also need to install NCD ThinPATH Manager on the server.

Installing an Update Version

If you are installing over a previously installed copy of NCD ThinSTAR Connect or ThinPATH Connect, an upgrade license key is required. The original license key is converted to an 0116 type license key which appears in the NCD License Manager.

New Installations

If this is a new installation, NCD ThinPATH Connect 2.0 requires a license key. If you enter a valid license key, the install program installs NCD ThinPATH Connect Version 2.0.

Note If installing over an evaluation copy, you need a valid license key for a new installation.

To install NCD ThinPATH Connect on the TMS server:

1. Log on as the system administrator.
2. Exit from all running programs.
3. Insert the ThinPATH Connect 2.0 CD in a Windows NT server that has TMS software installed.

Note If TMS software is not loaded on the server, the installation halts and a dialog appears, saying TMS must be installed. When you click **OK**, the installation program exits.

4. Launch the installation program **setup.exe** from the ThinPATH Connect folder on the CD or wait until the Autorun feature starts.
5. Click **Next** on the Welcome dialog.

6. When the Product License Keys dialog appears, select **Add License Key**, enter the license key that appears on the sleeve of the CD, and click **OK**.
7. Respond to the prompts that appear.
8. The Setup Complete dialog informs you when the installation is complete.

Note The install program does not install files directly onto terminals. TMS downloads files to terminals only when they are restarted, based on TMS settings on the server.

9. Configure the ThinSTAR Manager (TMS) to install (upgrade) the NCD ThinPATH Connect emulators the next time the NCD ThinSTAR terminals power on. The Installing Emulators on Terminals topic that follows provides a procedure for this.

By default, only one emulator is installed on NCD ThinSTAR terminals. The NCD ThinPATH Connect contains the base NCD ThinPATH Connect software and the ANSI-BBS emulator. The NCD ThinPATH Connect is a required component and must always be installed (upgraded) on the terminals.

10. Power on the NCD ThinSTAR terminals.

Installing Emulators on Terminals

To configure the upgrade policy in TMS so that additional emulators will be installed on NCD ThinSTAR terminals:

1. On the TMS server, bring up the Control Panel.
2. Open the ThinSTAR Manager.
3. Select the terminal type in the Select Terminal Model window.
4. Select the NCD ThinPATH Connect component and click **Show Details**.
5. Select a terminal emulator component.
6. Select the upgrade policy, **Upgrade if newer**, then click **Show Main**.
7. The next time the NCD ThinSTAR terminals power on, they will be upgraded with the emulators you selected.

Note If an NCD ThinSTAR terminal has space constraints, please refer to the next topic, Uninstalling ThinPATH Connect.

For detailed instructions about installing emulations, see the *NCD ThinSTAR System Administrator's Guide*.

Note Install only the emulations terminal users need because each emulation requires additional memory and a forced recovery is necessary if you exceed memory limits.

Online Help and Documentation

After installing NCD ThinPATH Connect, online help and documentation are available on the NT server in the TMS installation directory under **ThinPATH Connect\doc**. Select **Start > Programs > NCD ThinPATH Connect** to see the online help and documentation.

Uninstalling ThinPATH Connect

Removing ThinPATH Connect From a Server

This section explains how to remove the NCD ThinPATH Connect software and terminal emulations from TMS and NT servers, and individual terminals.

A program to uninstall NCD ThinPATH Connect 2.0 is available on your TMS server. You can use it to remove ThinPATH Connect from TMS and your NT server. The uninstall program removes all ThinPATH Connect emulators from TMS and it also removes the Start Menu items created by the NCD ThinPATH Connect 2.0 install program.

To access the uninstall program, go to the Control Panel and use the Add/Remove Program applet.

To uninstall ThinPATH Connect:

1. Click **Start** on the desktop of the server.
2. Select **Add/Remove Programs**.
3. Scroll down the list of programs and select **NCD ThinPATH Connect**.
4. Click **Add/Remove**.
5. Click **Yes** to remove ThinPATH Connect.
6. A dialog appears to inform you when the uninstall program finishes.

Removing ThinPATH Connect from Terminals

To remove terminal emulations installed on an NCD ThinSTAR terminal, first reconfigure the TMS upgrade policy on the server and then reset the terminal to its factory default state as follows:

1. Reconfigure the TMS upgrade policy on the Windows NT server for the terminal emulations you want to remove to **Do not upgrade**.
2. On each NCD ThinSTAR terminal, with the Connection Manager showing, press **F2** to view the Terminal Properties.
3. On the General tab, click the checkbox for Reset the terminal to factory-default property settings and click **OK** to reboot the terminal.

Notes If you reset the terminal without modifying the TMS upgrade policy, the same terminal emulations will be installed again.

A terminal reset **removes all defined connections** for all clients on an NCD ThinSTAR terminal. See the *NCD ThinSTAR System Administrator's Guide* for further information.

CHAPTER 4

Configuring NCD ThinPATH Connect Connections on ThinSTAR Terminals

This chapter explains how to add emulation connections and configure these session properties:

- Connector properties. Properties that set the method of connecting to a remote system.
- Emulation properties. These properties specify settings for the type of host terminal **NCD ThinPATH Connect** emulates while connected to a remote system.
- Display properties. Settings that define the appearance of a session.
- Other options.

Adding an Emulation Connection

You add an emulation connection with the **NCD ThinSTAR Connection Manager**, then configure emulation session properties with **NCD ThinPATH Connect**.

Before you begin to add an emulation connection, consult with the system administrator of the host system to get the following information:

- The terminal emulations the host supports.
- The IP address or host name of the host system.

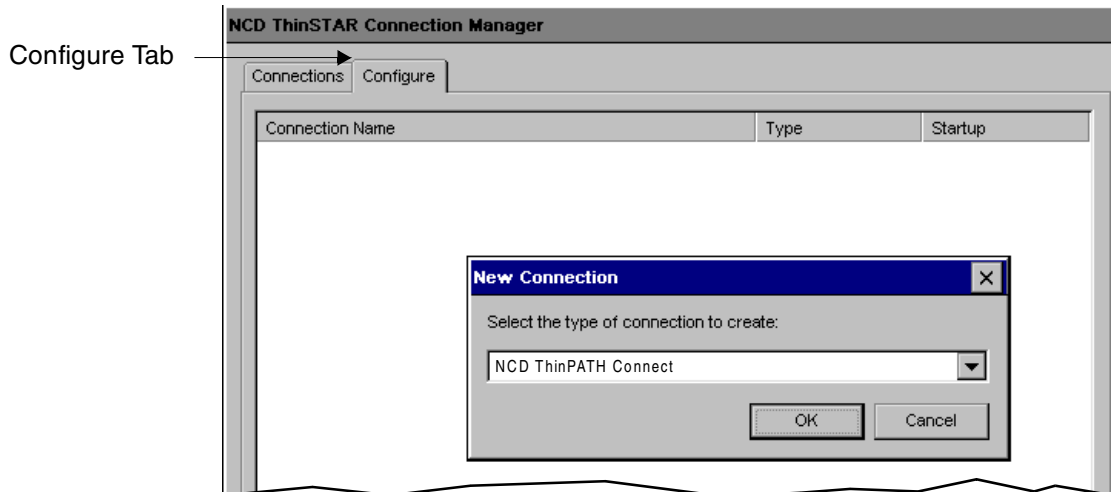
Configuring NCD ThinPATH Connect Connections on ThinSTAR Terminals

To add an emulation connection:

1. Press **Ctrl+Alt+End** on your keyboard to bring up the **Connection Manager**.
2. Select the **Configure** tab and click **Add**.

Note If the **Configure** tab is not visible, press **F2** to bring up NCD ThinSTAR Terminal Properties. Select the **Management** tab and check Display NCD ThinSTAR Connection Manager's Configure Tab, then click **OK**.

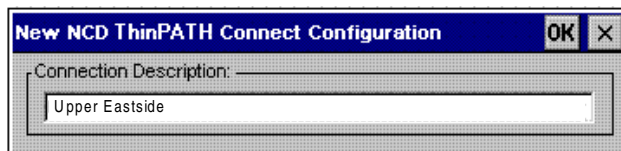
3. When asked for the type of new connection, select **NCD ThinPATH Connect** and click **OK**.



4. When asked for a description of the connection, enter it as shown below, then click **OK** in the upper right corner.

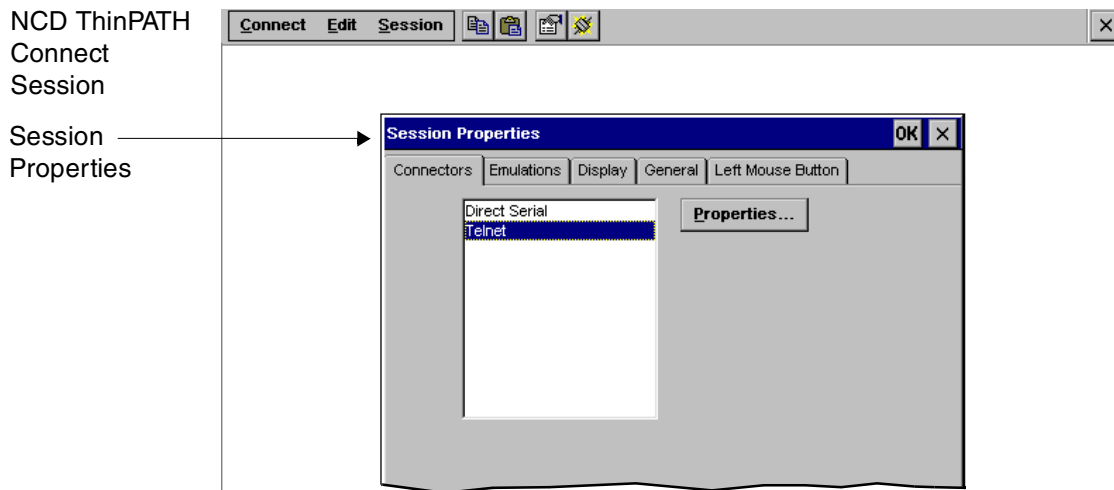
Characters not allowed:

? * | \ / . : "



Configuring Session Properties

After you enter the description and click **OK**, **NCD ThinPATH Connect Session Properties** appears.



In Session Properties you can configure these types of emulation session properties:

- **Connectors.** Specify the host name on this tab.
- **Emulations.** Specify the host emulation type on this tab.
- **Display.** Change the general display, font, cursor properties, behavior of the history buffer, or enable hotspots on this tab.
- **General.** Set session options, either to **Auto connect on session opens** for **Full screen terminal mode**. If you select the **Full screen terminal mode**, the **Enable menu and toolbar** and **Hide mouse cursor** options are available.
- **Left Mouse Button.** Use the Left Mouse Button tab to set Mouse Event, Key Modifier, Default Mapping, and Mouse Action settings as needed. You can reset all mouse settings to their default settings at any time by clicking the **Restore** button under **Default Mapping**.

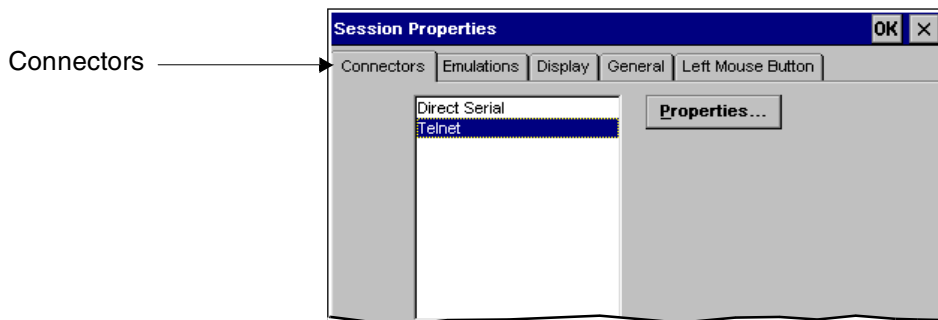
See the online help for detailed information about these properties.

Configuring Connector Properties

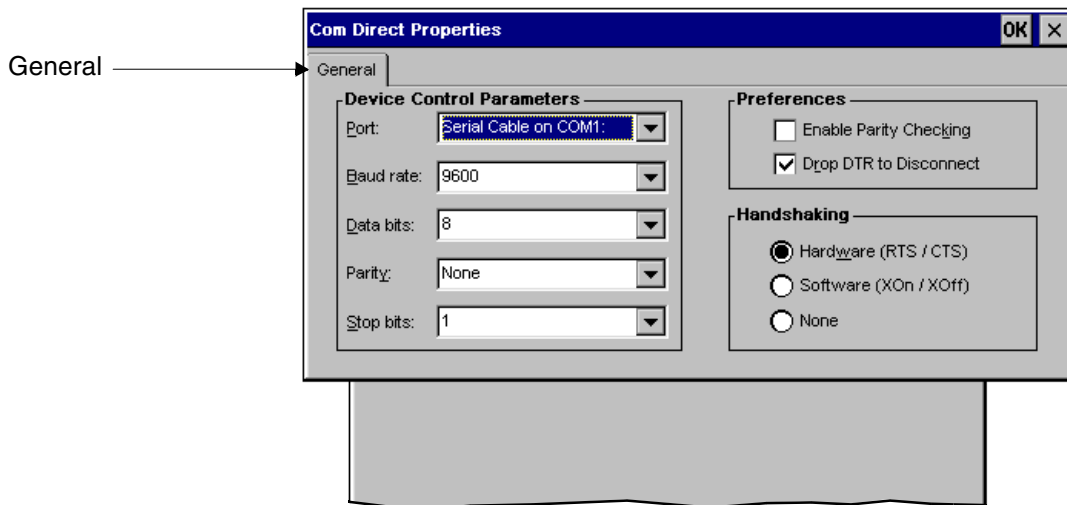
Note The host name or IP address is required, and you may configure other properties.

To configure connector properties:

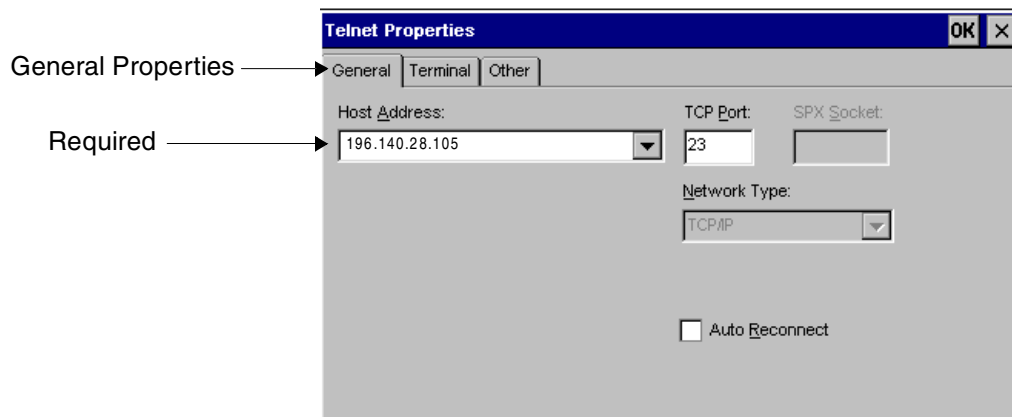
1. Select the **Connectors** tab.



2. On the Connectors tab in Session Properties, select Direct Serial if you are using a cable to connect to the host.
3. Click **Properties**, then set Device Control Parameter, Preferences, and Handshaking settings on the General tab of the Com Direct Properties dialog shown here.



4. Select Telnet On the Connectors tab to use a telnet connection to the host and click **Properties**.
5. Enter a host name or an IP address in the **Host Address** field on the **General** tab, as shown here.

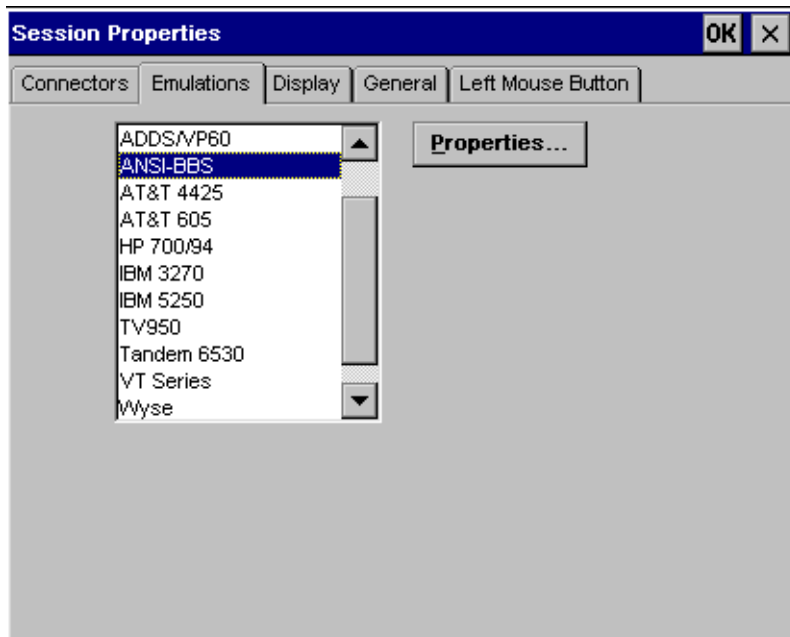


6. Set other properties as needed, then click **OK** to return to **Session Properties**.

Configuring Emulation Properties

The ANSI-BBS emulation is selected by default. To configure another emulation and its properties:

1. Click the **Emulations** tab.
2. Select the terminal emulation you want to use.



3. To configure the emulation properties for the selected terminal emulation (terminal protocol), click **Properties**.

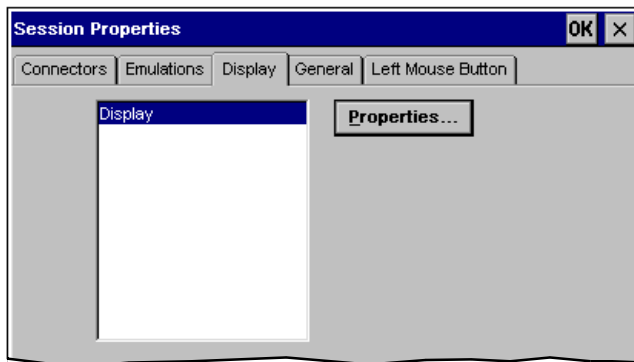
Note ThinPATH Connect displays tabs appropriate to the terminal emulation you select. The tabs vary from one emulation to another.

4. Select the tabs containing the property settings you want to set.
5. Make the property settings.
6. When you finish setting the host emulation properties, click **OK** to return to **Session Properties**.

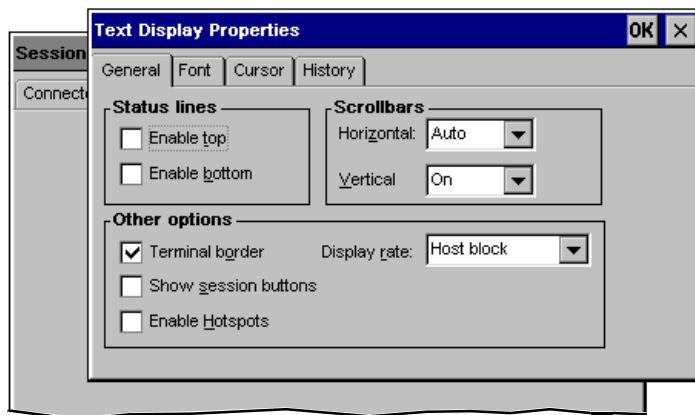
Configuring Display Properties

If you want to view or change the display properties, follow the steps below. (You are not required to configure display properties.)

1. Select the **Display** tab.

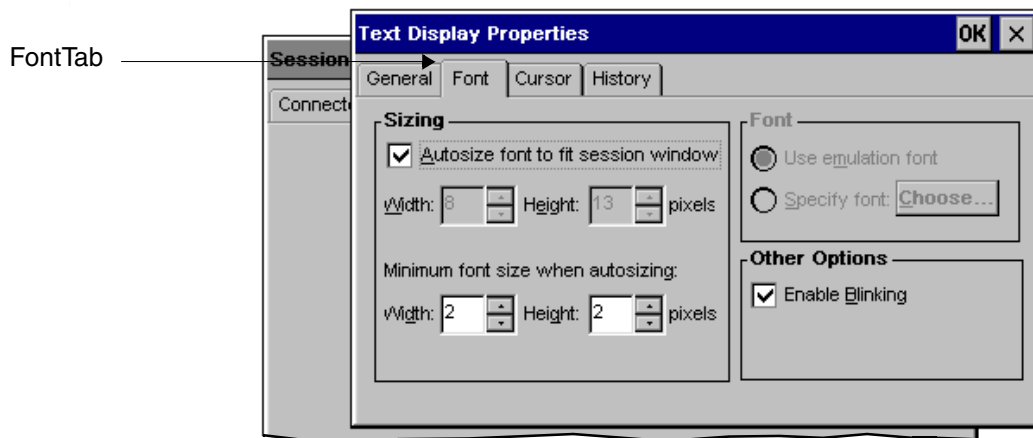
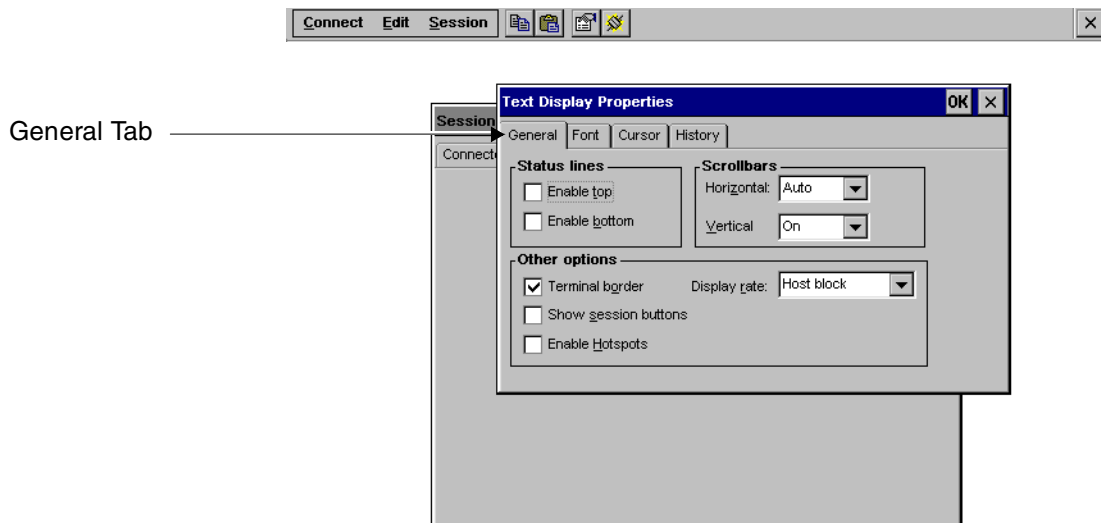


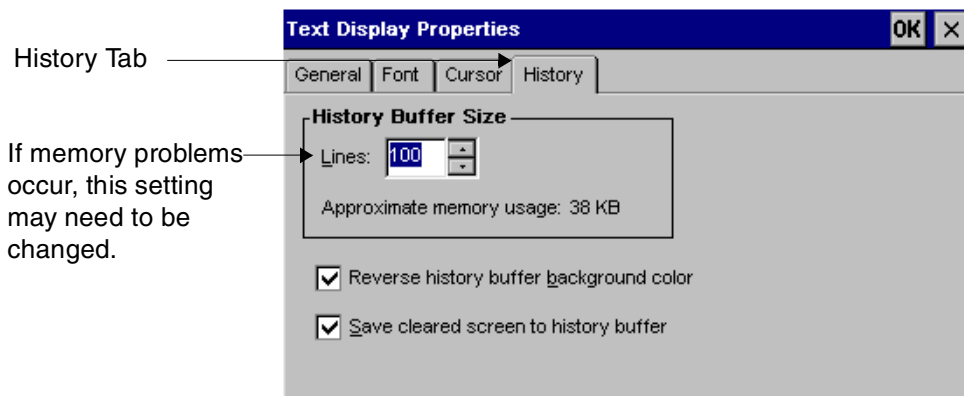
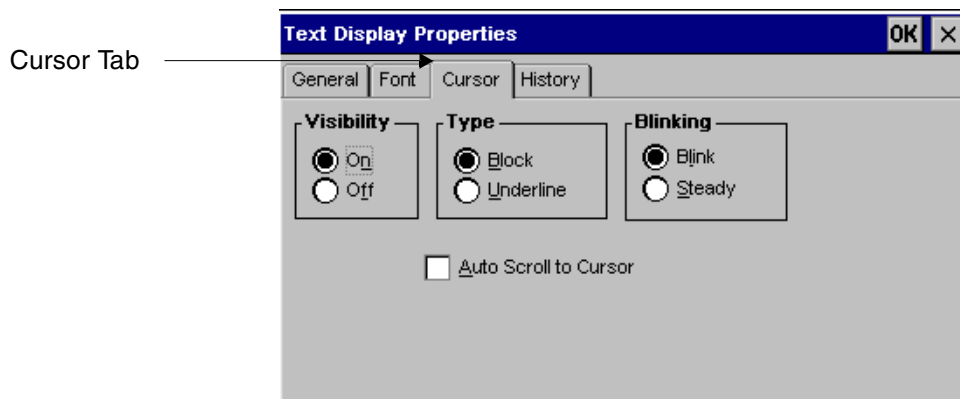
2. Click **Properties**.
3. You can view or configure properties on the following tabs:
 - General
 - Font
 - Cursor
 - History



Configuring NCD ThinPATH Connect Connections on ThinSTAR Terminals

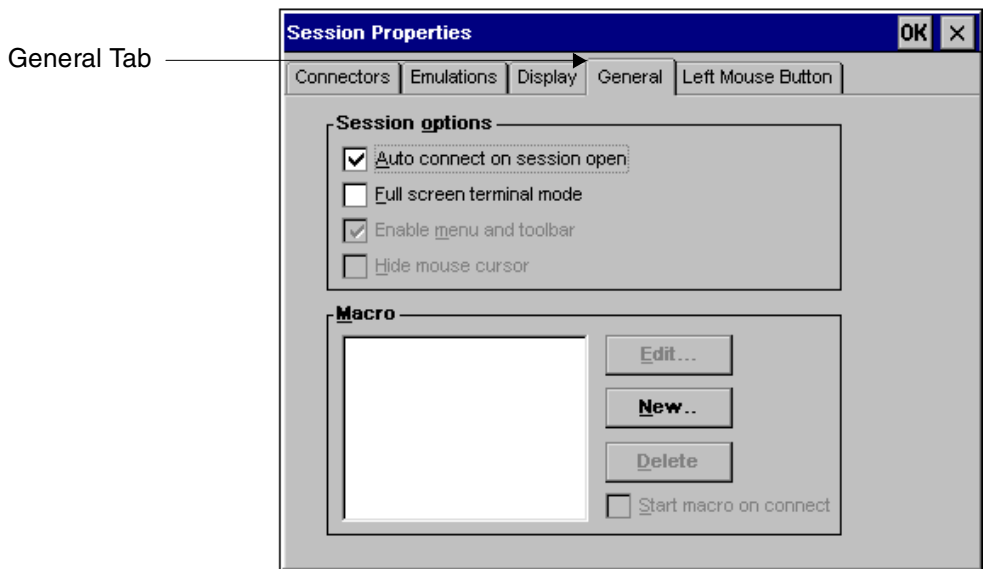
The display properties are shown in the screens that follow.





Configuring General Properties—Session Options and Macros

Use the Session Properties General tab if you want to reconfigure sessions options or macros.

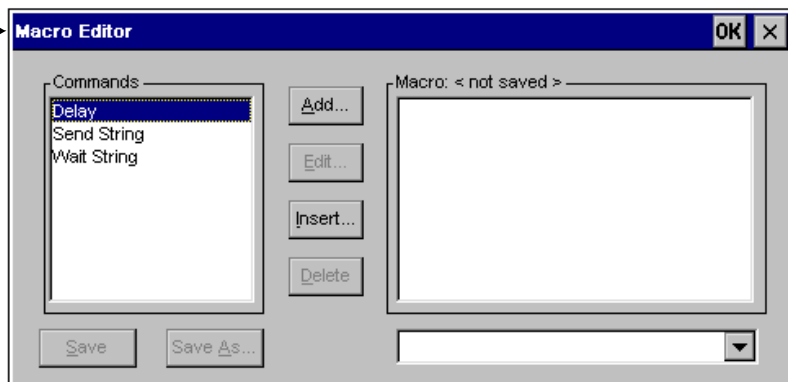


Session options. Session options that are not available are grayed out. Set these options as needed by clicking the three way check boxes.

Macros. If you want to view or change macros:

1. Select the General tab.
2. To create a new macro, click **New** and the Macro Editor dialog appears as shown in the following figure.

Macro Editor Dialog



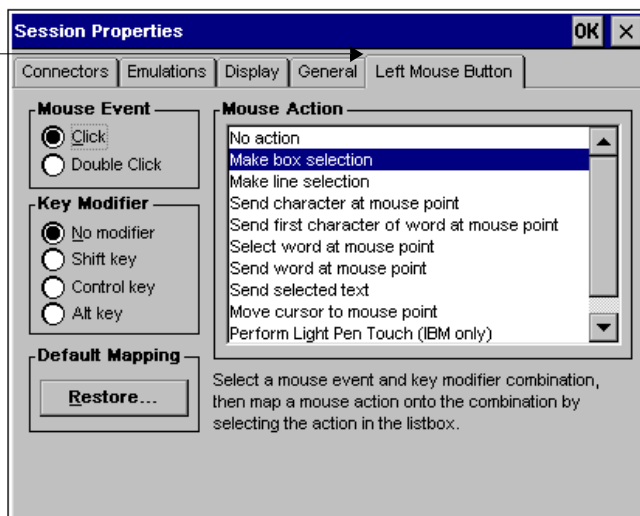
To edit or delete a macro select it from the Commands panel.

Configuring Mouse Properties

To change the behavior of the left mouse button:

1. Select the Left Mouse Button tab on the Session Properties dialog.

Left Mouse Button Tab



2. Select the mouse event and key modifier combination you want, then map a mouse action onto the combination by selecting the action in the Mouse Action list box.

Note To return all settings on this tab to their default settings, click **Restore**.

3. Click **OK** to return to **Session Properties**.
4. Click **OK** in **Session Properties** to accept the properties you have defined.

This completes the session specification and brings up the **Connection Manager** automatically so you can start a connection. For instructions, see Chapter 5, *Deploying Connections Through ThinPATH Manager*.

Note Later, during a session, you can select **Session > Properties** to edit session properties. Then, if you want to save the edited properties, you can select **Session > Save**.

If you do not save session changes through this menu, you are prompted to save changes when you close the connection.

CHAPTER 5

Deploying Connections Through ThinPATH Manager

Using ThinPATH Manager to Create and Distribute ThinPATH Connect Configurations

NCD ThinPATH Connect and NCD ThinPATH Manager are compatible. Using them together simplifies the creation and deployment of ThinPATH Connect configurations on ThinSTAR terminals by allowing the configuration on the NT system.

Making the configuration on the NT system requires the FutureSoft DynaComm Connectivity Series (DCS) program, v. 7.1.0.4. Contact your NCD sales representative for ordering information.

Note If DCS is not installed correctly, the NCD ThinPATH Manager Configuration Tool gives an error message when you attempt to add a connection.

Installing DCS

In addition to installing the ThinPATH Manager and the ThinPATH Connect software (refer to Chapter 3, *Installing NCD ThinPATH Connect*), you also need to install the DCS program on your Windows NT server if you want to be able to configure ThinPATH Connect configurations for ThinSTAR terminals using the ThinPATH Manager Configuration Tool (this software is available separately).

Note You can install DCS at any time, so long as it is before you wish to deploy ThinPATH Connect sessions.

Using the ThinPATH Manager Configuration Tool

For information about using the NCD ThinPATH Manager Configuration Tool, please refer to the *NCD ThinPATH Manager System Administrator's Guide*.

ThinPATH Connect Configuration Files

When a new ThinPATH Connect configuration is created with ThinPATH Manager and DCS, it may use the following types of files:

- Connect Session (**.ses**) files. A **.ses** file defines the primary characteristics of a separate, defined session.
- Attribute Map (**.acm**) files, which contain specifications for the character attributes of the displayed text.
- Keyboard Map (**.kbm**) files, which contain keyboard mappings that translate from the hardware keyboard being emulated to the virtual keyboard it represents by the ThinSTAR keyboard.
- Hotspots (**.hot**) files.
- Character Translation (**.trf**) files.

The system administrator uses ThinPATH Manager to send these associated files as a ThinPATH Connect configuration to ThinSTAR terminals managed by a Windows NT server that has ThinSTAR Management Service (TMS) loaded on it.

Similarities and Differences—Session Properties on a Terminal and Session Properties on a Windows NT Server

The DCS Session Properties interface—reached by using the NCD ThinPATH Manager Configuration Tool—provides configuration options on a Windows NT server that are similar to the options on the ThinPATH Connect Session Properties interface on ThinSTAR terminals. The topics that follow discuss limitations and additional features.

Features and Limitations

Importing Session Connection Files

You (the system administrator) can use the ThinPATH Manager to select previously created configuration files stored in other directories, and use them as connections in the ThinPATH Manager Configuration Tool.

Unsupported DCS Session Properties

The following DCS Session Properties do not work with ThinPATH Connect configurations deployed to ThinSTAR terminals:

Connector Types

Only Telnet and Direct Serial connector types are supported.

File Transfer Types

No file transfer types are supported.

Scripting

DCS scripting is not supported.

Tracing

Trace features are not supported.

Mouse

Only Left Mouse Button properties are supported.

Memo

The memo feature is not supported.

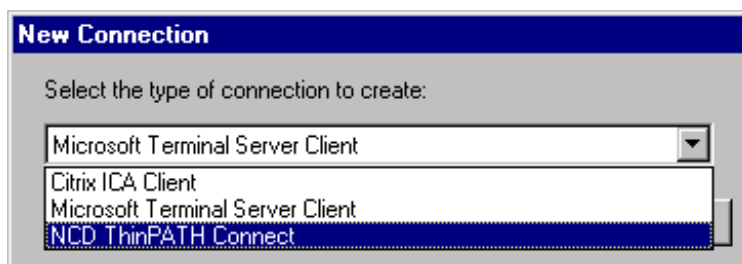
Creating Connections With ThinPATH Manager

You can create new connections using the ThinPATH Manager Configuration Tool, an interface that appears on the NT server. See the steps provided in the *NCD ThinPATH Manager Systems Administrator's Guide* for details on using the ThinPATH Manager Configuration Tool to create a new connection within the tool.

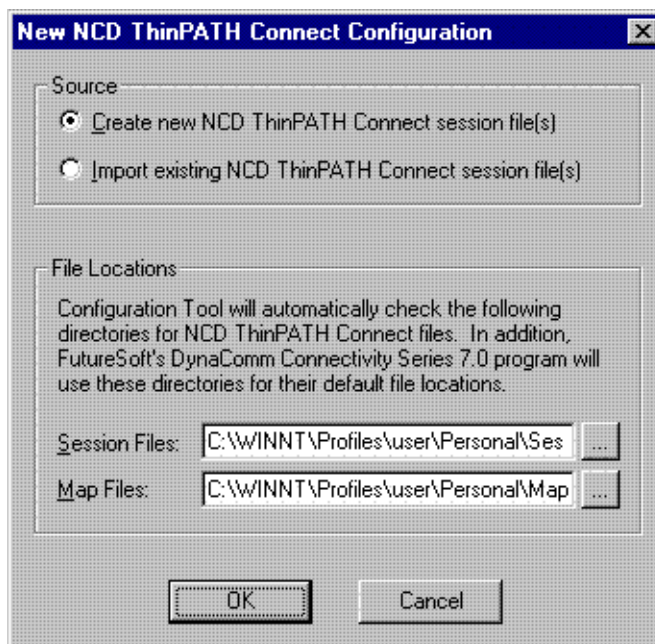
Creating A New NCD ThinPATH Connect Configuration

To create a new ThinPATH Connect configuration:

1. On the **Connections > Configure** tab of the ThinPATH Manager Configuration Tool, select NCD ThinPATH Connect in the New Connection drop-down list shown here:



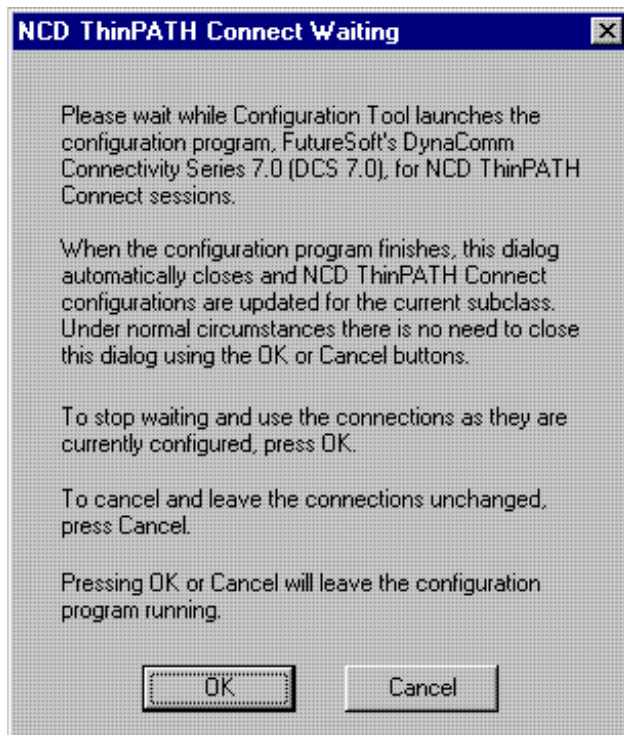
- The NCD ThinPATH Connect Configuration dialog shown below appears:



- Select the button for “Create new NCD ThinPATH Connect Session file(s).”
- Click **OK** and DCS automatically starts.
For information on how to use the DCS interface program tool, see the next topic.

DCS Tool

The NCD ThinPATH Connect Waiting dialog, shown below, appears when DCS is active (running).



The next topic provides step-by-step directions for creating new configurations (session files).

Creating New Sessions in DCS

Once DCS is running, create a new session by selecting **Files > New > Session**. The New Session Wizard starts.

- ThinPATH Connect supports all the emulations listed (for example, ANSI-BBS).
- ThinPATH Connect supports two of the connection types, Direct Serial and Telnet.
- ThinPATH Connect does not support any of the file transfer types.

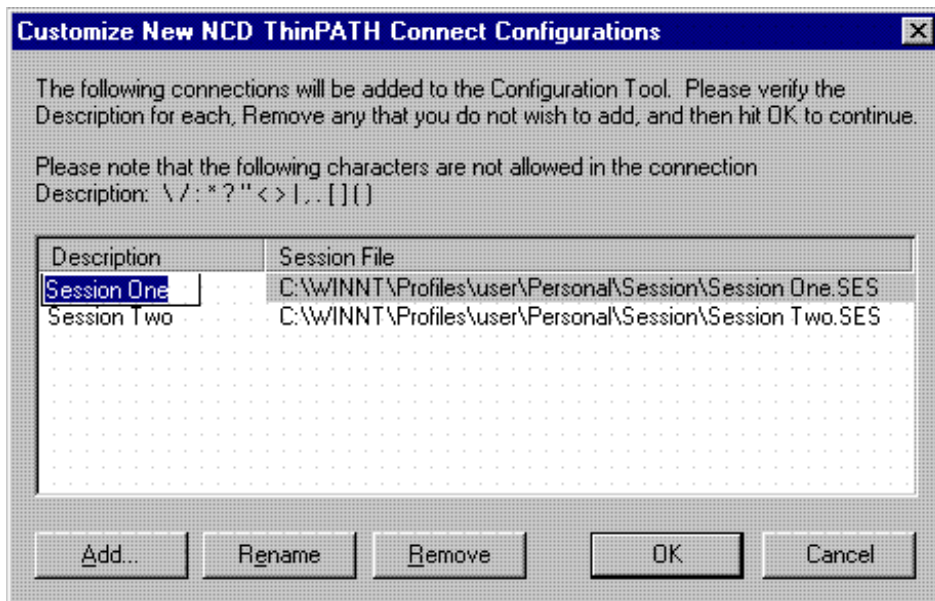
After completing the New Session Wizard, the Session Properties dialog appears, so you can configure other characteristics of the session. See “Unsupported DCS Session Properties” on page 5-3 for a list of unsupported DCS session properties.

Note For more information about using DCS, refer to the DYNACE.HLP file by clicking **Help > Contents** or by pressing **F1**.

After configuring the session, saving the session file, and exiting from DCS, control should return to the ThinPATH Manager Configuration Tool. The NCD ThinPATH Connect Waiting Dialog closes and the Customize New NCD ThinPATH Connect Configurations dialog appears. See “Customizing New Connections” on page 5-8 for more information about customizing connections.

Customizing New Connections

The ThinPATH Manager Configuration Tool assigns default descriptions (names) for connections associated with the new session file as shown in the figure below. This dialog gives you (the system administrator) the ability to customize the descriptions that are assigned to these configurations (connections).



To Rename Connections

To modify the description (name) of a new connection:

1. Select the connection description you want to change and click the **Rename** button (or simply double click on the connection description).
2. Enter a new description or name for the connection.

Note The description must be unique—the program does not allow duplicate descriptions. Also, you cannot enter a description that contains invalid characters.

The invalid characters are:

\ / : * ? “ < > | , . [] () { }

3. Press **Enter** on the keyboard or click outside the Edit dialog to accept the changes or press the **Esc** key to revert back to the previous description (connection name).

To Remove Connections

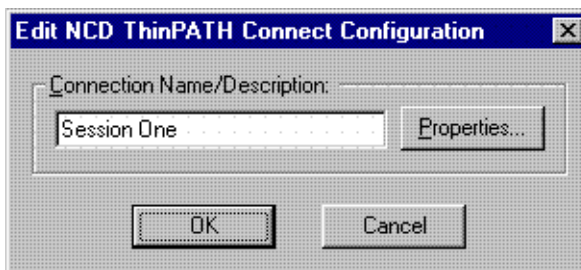
To remove a connection, select it and click **Remove**.

Editing Connection Configurations

To edit or modify a previously created ThinPATH Connect configuration:

1. Select a Telnet type connection on the **Connections > Configure** tab of the ThinPATH Manager Configuration Tool.
2. Click **Edit**.

The Edit NCD ThinPATH Connect Configuration dialog shown here provides the interface for modifying an existing configuration (connection):

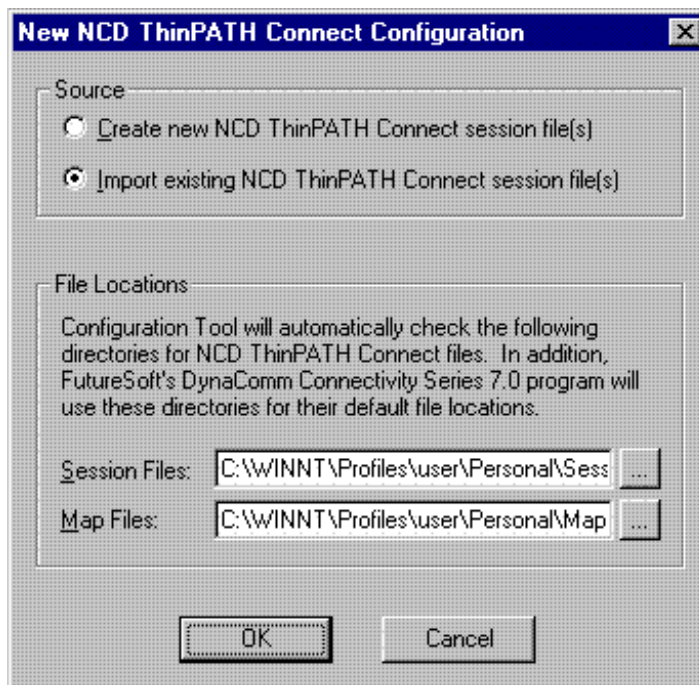


3. If desired, modify the Connection Name/Description of the configuration (connection) in this dialog.
4. To change session properties, click **Properties**.
5. The software launches DCS and the NCD ThinPATH Connect waiting dialog (shown on page 5-6) appears.
6. Click **OK** to accept the description changes or **Cancel** the changes.

Note If DCS was executed using the **Properties** button and new session files were created in the registered session file directory, the Customize New NCD ThinPATH Connect Configurations dialog appears when you press **OK**. This gives you the option of incorporating the new configurations.

Importing Session Files

The NCD ThinPATH Manager Configuration Tool provides a mechanism for importing existing Connect Configurations (session files). The dialog for this mechanism is shown here:

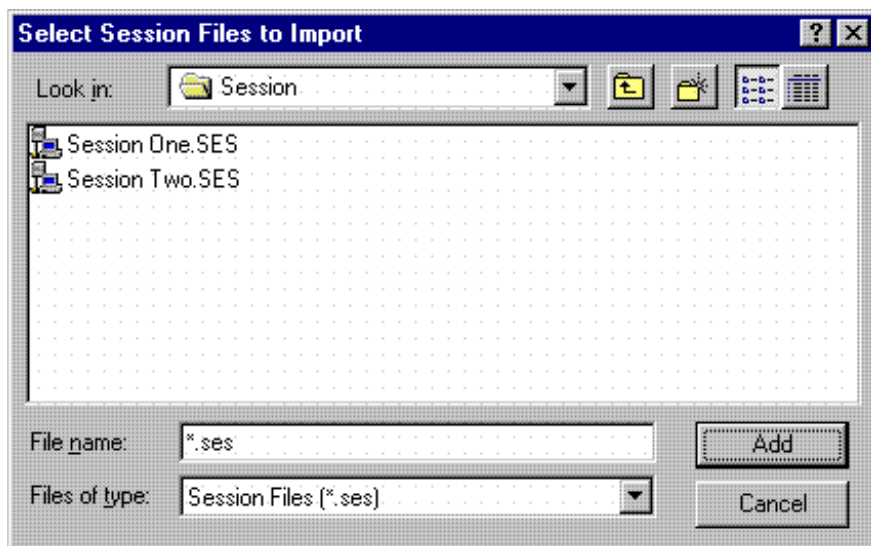


To import existing session file(s):

1. In the New NCD ThinPATH Connect Configuration dialog, click Import Existing NCD ThinPATH Connect session file(s), then click **OK**.

2. The Select Session Files to Import dialog shown below appears so you can select a previously defined session.

Note The “Look in” directory at first defaults to the configured Session File directory, as initially configured in the New NCD ThinPATH Connect Configuration dialog initially. If necessary, browse to the files you want to import.



3. Select the session files you want to import and click **Add**.

At this point, the software takes you to the Customize New NCD ThinPATH Connect Configurations dialog shown on page 5-8 and adds the selected files to the list.

Note If you click **Cancel** instead, the dialog disappears—this leaves the Customize New NCD ThinPATH Connect Configurations dialog open in the same state that it previously had.

Use the Customize New NCD ThinPATH Connect Configurations dialog to customize your ThinPATH Connect configurations.

CHAPTER 6

Using Emulation Sessions and Connections

This chapter explains how to use emulation sessions on ThinSTAR terminals and how to use ThinPATH Connect configurations to remote hosts.

Understanding Sessions and Connections

You add a Telnet-type connection through the **NCD ThinSTAR Connection Manager**, then configure session properties that specify the host, the type of emulation, and display options.

After you configure properties, you can start a Telnet-type connection with a remote host. All communication with the remote host occurs within an emulation session.

During a session, you can modify and save session properties through the **Session** menu options.

If you have enough memory, you can switch to another Telnet-type connection, RDP connection, or ICA connection, using connection hotkeys (**Ctrl+Alt+Up arrow** and **Ctrl+Alt+Down arrow**).

Navigation Paths

As you perform Telnet-type connection tasks, you will bring up several different windows. The table below shows the navigation paths to and from NCD ThinPATH Connect.

To bring up . . .	Do this . . .
<p>NCD ThinSTAR Connection Manager</p>	<p>Press Ctrl+Alt+End. Note Using Connect > Close to close a session brings up the Connection Manager automatically.</p>
<p>Another active connection</p>	<p>If hotkeys are enabled, use Ctrl+Alt+Up Arrow and Ctrl+Alt+Down Arrow.</p>
<p>NCD ThinPATH Connect Session Properties</p>	<p>From an emulation session window, select Session > Properties. From the Connection Manager, select the Configure tab, then select the connection and click Edit. Notes You cannot use this method if connected to the remote host. Adding a new connection brings up the properties automatically.</p>

Connecting to a Host and Closing a Connection

You connect to a remote host, reconnect after a timeout, and close a connection, all through the **NCD ThinSTAR Connection Manager**.

Connecting to a Remote Host

After you have added a Telnet-type connection with the **Connection Manager** and configured emulation session properties for it, you can connect to the remote host.

To connect to the remote host:

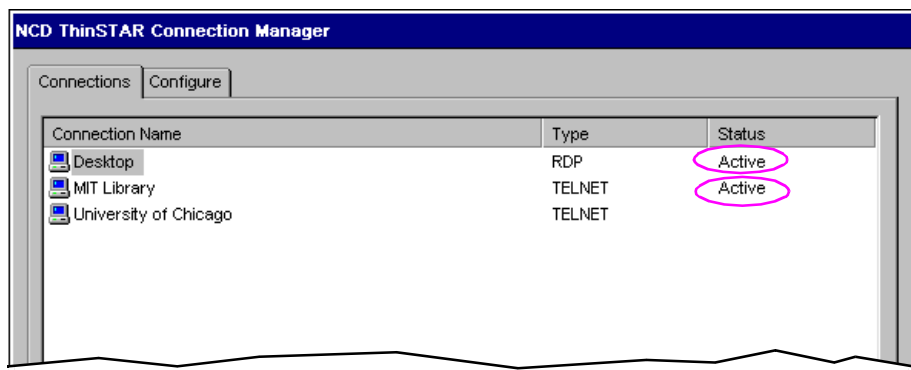
1. Press **Ctrl+Alt+End** to bring up the **Connection Manager**.
2. Select the **Connections** tab.
3. Select a Telnet-type connection and click **Connect** to bring up **NCD ThinPATH Connect**.

If you are not already logged in, the host prompts you to log in.

The Telnet-type connection occurs within an emulations session, so you can use NCD ThinPATH Connect menu and buttons while you are connected to the host.

If your NCD ThinSTAR has adequate memory, you can start multiple Telnet-type, RDP, and ICA connections.

This example shows that an RDP connection and a Telnet-type connection are active:



Reconnecting After Timing Out

If a connection times out, you can start another connection with the host.

Stopping and Restarting a Telnet-type Connection

To stop (interrupt) a Telnet-type connection, select **Session > Stop** in NCD ThinPATH Connect. If you prefer, you can use the start/stop button.



Note After ThinPATH Connect restarts the connection with a remote system, the **Session > Start** menu option becomes **Session > Stop**.

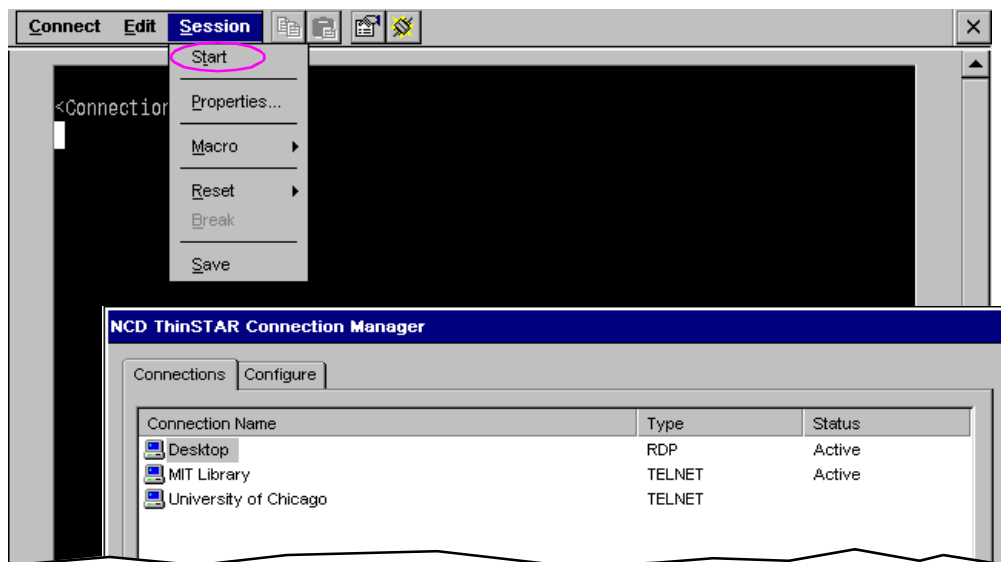
When you stop a connection, there is no communication with the remote host. When you start a connection, communication resumes. As long as you do not close the emulation session, you can start and stop Telnet-type connections in **NCD ThinPATH Connect** by using **Session > Start** or **Session > Stop**.

If you are still logged into the remote system, log out. This closes the connection.

Ending an Emulation Session

In the example shown here, a Telnet-type connection to a host computer has been stopped (disconnected), but the emulation session on the NCD ThinSTAR terminal is still active, as shown in the **Connection Manager**.

Note To restart the emulation session in NCD ThinPATH Connect, select **Session > Start**.



To end the emulation session on the NCD ThinSTAR terminal:

1. Select **Connect > Close** to end the emulation session and return to the **Connection Manager**. (Connect here refers to NCD ThinPATH Connect.)
2. If you changed any of the session properties during the session, the program prompts you to save them before it stops the session. Saving properties may take a few seconds.

Deleting a Connection

To delete a connection from the **Connection Manager**:

1. If you are logged into a remote host, log out.
2. Press **Ctrl+Alt+End** to bring up the **Connection Manager**.
3. Select the **Configure** tab.
4. Select the connection you want to delete, then click **Delete**.
5. Click **Yes** if you are sure that you want to delete the connection.

Glossary

autologin macros	See macros .
client	A device on a network that accesses resources (services, applications or data) provided by a server. See also thin client .
connection	<p>Establishment of communication between an NCD ThinSTAR and a remote host. You can predefine any number of connections on an NCD ThinSTAR.</p> <p>In ThinPATH Connect, <i>connection</i> is considered synonymous with <i>session</i>. From the Windows-based terminals' perspective, connections are made, while connection software treats the connections as sessions.</p> <p>See emulation session.</p>
desktop	The working area of your screen where windows, icons, and dialog boxes appear.
DCS	DynaComm Connectivity Series, a FutureSoft software product sold by NCD for use in conjunction with ThinPATH Manager to create ThinPATH Connect connection (connect session) files on a Windows NT server.
DNS	Domain Name System. A distributed database and utilities for defining TCP/IP domains, and for translating domain names to IP addresses. See also domain and fully qualified domain name .

domain	<p>A collection of systems that are managed together. In managing NCD ThinSTARs, you must be aware of two types of domains:</p> <p>A DNS domain is a TCP/IP construct for defining hierarchical groupings of devices on the Internet. It is a segment of the Internet granted a unique, official name by InterNIC (the organization administering Internet names and IP addresses). A domain name generally conveys information about the type of entity using the domain name. It has the form <i>name_n.name_n-1...name_0.org_type</i>, where <i>name_n</i> is a subdomain of <i>name_n-1</i>, and <i>org_type</i> designates the type of organization (<i>com</i> for commercial organizations, <i>edu</i> for educational organizations, and <i>gov</i> for government organizations). For example, <code>acctg.bigcorp.com</code> designates a subdomain of <code>acctg</code> within a domain of <code>bigcorp</code>, a commercial organization. See also fully qualified domain name.</p> <p>A Microsoft Windows NT domain is a unique group of Windows NT Servers and workstations defined by the system administrator for centralized administration.</p> <p>See also DNS and fully qualified domain name.</p>
emulation session	<p>All emulation connections take place within an emulation session, which begins when you connect to a remote host. NCD ThinSTAR Connect maintains this session with the NCD ThinSTAR so that you can change session properties during a connection.</p>
focus	<p>Being in a mode to receive input from the keyboard or mouse. Used in reference to tasks on a graphical computer desktop. While there may be several tasks that are currently active, only one has the focus at a time.</p>
fully qualified domain name	<p>A text string designating a networked device by prefixing its hostname to its DNS domain name. For example:</p> <p><code>SaleServer.acctg.bigcorp.com</code> designates a device with the hostname <code>SaleServer</code> in the domain <code>acctg.bigcorp.com</code>. See also DNS and domain.</p>
FQDN	<p>See fully qualified domain name.</p>
gateway	<p>A computer that attaches to two or more networks and routes packets from one to the other.</p>
IP	<p>Internet Protocol. Part of the TCP/IP family of protocols. Responsible for addressing and routing datagrams at the network level.</p>

host	A device on the network, such as an NCD terminal or a computer.
hostname	A string used to uniquely identify a device on a network. It is part of the domain name.
IP address	Internet Protocol address. Internet addresses are currently 32-bit binary numbers written as four decimal bytes separated by periods, for example, 127.0.0.1. The IP address identifies devices on the network so that they can participate in the IP network using the TCP/IP protocols.
Internet	The collection of networks and gateways that use the TCP/IP protocol family and function as a single, cooperative virtual network that connects many businesses, universities, and government facilities.
LAN	Local Area Network, one that connects devices over relatively short distances, typically within a building or campus.
macros	A macro is a sequential list of commands (a script) which is executed during a session. Macros are often used to automate a user login in process.
Microsoft Windows CE	A compact Microsoft operating system, originally developed for handheld devices, that has been adapted for use in thin client devices. See also thin client .
Microsoft Terminal Server Client	An implementation of Microsoft's RDP remote session protocol. It enables NCD ThinSTARs and Terminal Servers to exchange graphical application input and output. See also client and Terminal Server .
NCD ThinSTAR Terminals	Network Computing Devices, Inc.'s Windows-based terminal implementations.
name server	A host that provides translation between network hostnames and IP addresses. See also DNS .
NCD ThinSTAR Management Service (TMS)	An NCD utility that runs on a Windows NT Server. Can be configured to automatically replace outdated or corrupt Operating Software on NCD ThinSTARs.
network server	See Windows NT server.
RDP	Remote Desktop Protocol, a proprietary communication protocol developed by Microsoft Corporation to enable exchange of graphical application input and output between Windows-based Terminals, such as the NCD ThinSTAR, and Terminal Servers.

Glossary

registered	The attribute of having been recorded in a database called the Registry in Microsoft Windows operating systems. For an application to be available on an NCD ThinSTAR, it must be registered in the NCD ThinSTAR's Registry.
Registry	A database integral to Microsoft Windows operating systems. It is used to record and track the presence and state of applications, hardware, and configuration files.
server	A computer or device that provides shared resources to network users.
session	See emulation session . In ThinPATH Connect, <i>session</i> is considered synonymous with <i>connection</i> .
subnet mask	A 4-byte value used in network communication to designate which part of IP addresses is to be interpreted as a subnet identifier, and which part is to be interpreted as a machine identifier. Used to divide a network into subnets.
subnet	A physical network within a larger IP network. A scheme that allows a site to use a single Internet network for multiple physical networks.
TCP/IP	Transmission Control Protocol/Internet Protocol. A common name for the Internet protocol family.
Telnet	The protocol that NCD ThinSTAR Connect uses to connect to a legacy host system.
terminal	A set of input and output devices, such as a monitor and keyboard, that access data and/or computing services on a server across a network.
Terminal Server	The Microsoft Windows NT Server 4.0, Terminal Server Edition operating system. It allows Windows-based terminals like the NCD ThinSTAR to run Windows NT applications remotely.
Terminal Server host	A personal computer running the Microsoft Windows NT Server 4.0, Terminal Server Edition operating system. See also Terminal Server .
thin client	A small operating system that manages input and output between a user's input/output devices (keyboard, mouse and monitor) and a server. (See thin client device .)
thin client device	Hardware running a thin client. (See thin client .)
ThinSTAR	See NCD ThinSTAR Terminals .

ThinSTAR Management Service	See NCD ThinSTAR Management Service (TMS) .
TMS	See NCD ThinSTAR Management Service (TMS) .
upgrade policies	Options offered by the NCD ThinSTAR Management Service (TMS) (TMS) that determine whether, and under what conditions, the Operating Software on NCD ThinSTARs will be automatically updated.
Windows-based terminal	A thin client device implemented to connect with Terminal Servers. (Also see NCD ThinSTAR Terminals and Terminal Server .)
Windows NT server	A version of Windows NT that provides centralized management and security, advanced fault tolerance, and additional connectivity.
WINS	Windows Internet Naming Service, a dynamic database and utilities that map the hostnames of Microsoft-based platforms to their assigned IP addresses. Also see DNS .

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