



NCD ThinSTAR Operating Software
and NCD ThinPATH Manager
Installation Guide

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Software Version

NCD ThinSTAR Operating Software 2.20; NCD ThinPATH Manager 2.20.

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Installation Guide

This guide is intended for the system administrator. It explains how to install NCD ThinSTAR Operating Software for automatic updates of terminal software and NCD ThinPATH Manager for centralized terminal configuration.

The instructions assume that you have a functioning Windows 2000 or Windows NT 4.0 network. If you need assistance in setting up a network or integrating Windows servers into a UNIX network, you may contact NCD Technical Training.

Features and Functionality

When you install these products on a Windows 2000 Server, Windows Terminal Server, or Windows NT 4.0 Server, the server becomes a Management Server with central terminal support.

■ **NCD ThinSTAR Operating Software**

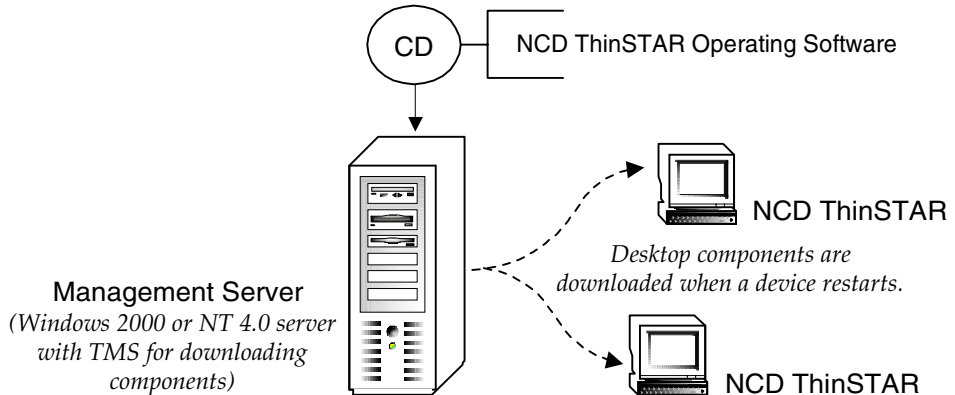
NCD ThinSTAR Operating Software provides the first level of central support. With it, you can replace or upgrade terminal software from the Management Server.

■ **NCD ThinPATH Manager**

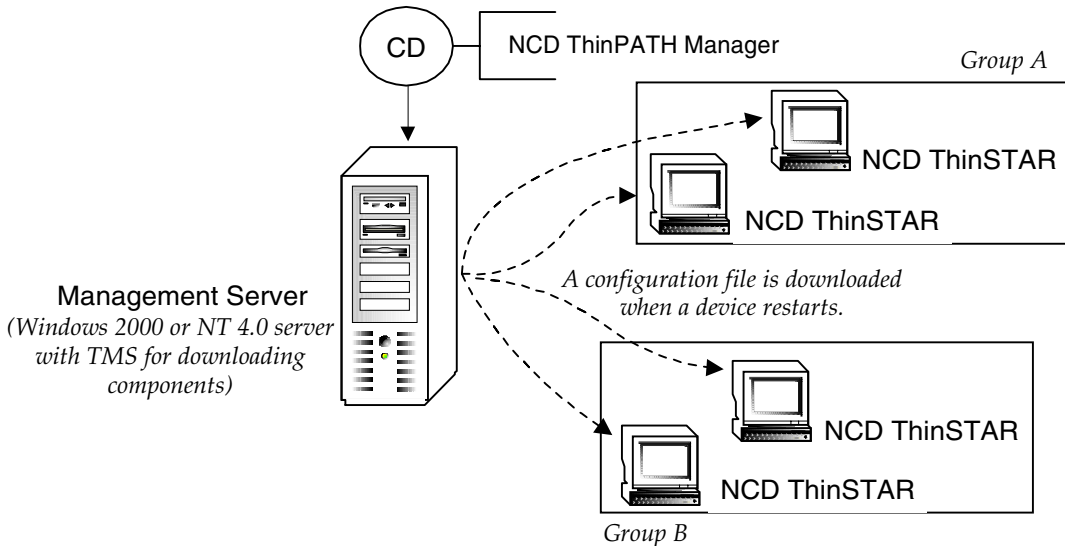
NCD ThinPATH Manager extends support to terminal configuration. With it, you can set terminal properties, connections, and other options at the Management Server.

You can also restart devices remotely and change terminal configurations remotely or from a web browser. You can use a browser because NCD ThinPATH Manager places an HTTP server on NCD ThinSTAR terminals. If your site has SNMP network management, you can install NCD ThinPATH Manager, then configure the SNMP agent and enable it to change terminal properties.

Installing NCD ThinSTAR Operating Software places NCD ThinSTAR Management Service (TMS) on the Management Server. TMS downloads software components from the Management Server onto NCD ThinSTAR terminals when they restart.



Installing NCD ThinPATH Manager places software for configuring terminals remotely on the Management Server. After the installation, you define groups of terminals and distribute preconfigured terminal properties and connections to them.

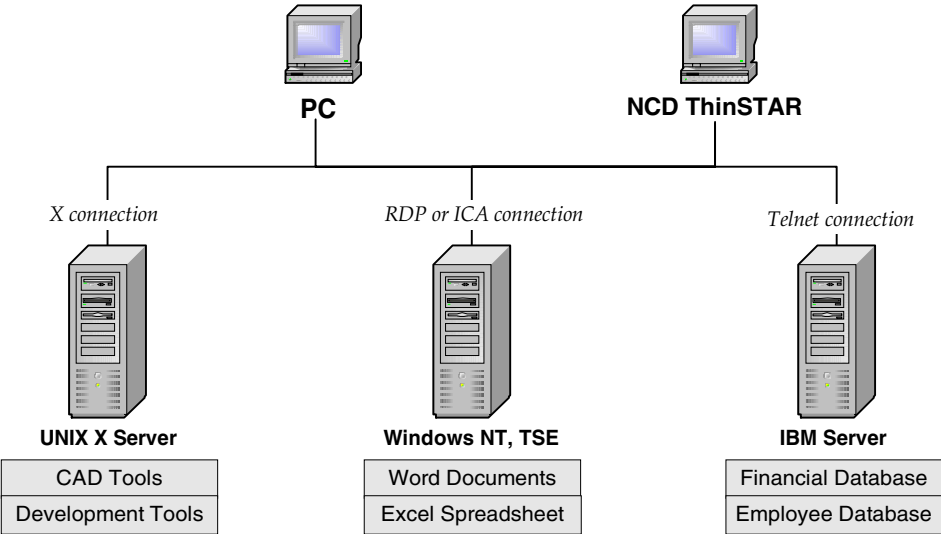


NCD ThinSTAR Operating Software and NCD ThinPATH Manager are part of NCD's comprehensive networking system.

Users of NCD products can work on virtually any application platform—including Windows NT, UNIX, and IBM. Their starting point can be either a Multiuser Windows NT network or a UNIX network.

This package is designed for NCD ThinSTAR terminals in a Windows NT network. Additional products add support for PCs.

The following shows how NCD users can reach applications.



Installation Requirements

Installation requirements are as follows:

- A Windows server that you can use as a Management Server

This can be a Windows 2000 Server, a Windows Terminal Server, or a Windows NT 4.0 Server.

For automatic recovery of NCD ThinSTAR Operating Software, Management Server, the terminal, and DHCP must be on the same subnet.

- Administrative rights to install or configure software

- Adequate flash memory

NCD ThinSTAR 200 terminals with additional NCD ThinPATH products (such as NCD ThinPATH Connect) may not have enough flash memory available to support the enhanced NCD ThinSTAR Operating Software and NCD ThinPATH Manager software plus the extra products. For information on customizing your installation to accommodate your memory limits, see the *NCD ThinPATH Manager Release Notes*.

- Special requirements for NCD ThinPATH Manager

- A license key
- The Microsoft SNMP Network Service installed, so that NCD ThinPATH Manager can restart terminals remotely
- A compatible web browser to configure individual terminals via the web with NCD ThinPATH Manager (for example, Netscape 4.0 and Microsoft Internet Explorer 4.0 and later)

Installation Environments

By design, terminals broadcast to the local subnet for updates and there should be one Management Server on the subnet to provide the updates.

However, each terminal has configuration settings, called Terminal Properties, and you can configure a terminal to receive updates from a Management Server outside the local subnet.

Note Startup guides tell you how to set up terminals after installation. These guides explain how to specify the IP address of the appropriate Management Server in Terminal Properties.

It is also possible to have multiple installations of NCD ThinSTAR Operating Software on the same subnet, but NCD does not recommend this type of installation. If the Operating Software is installed multiple times on the same subnet, any of those Management Servers may send new software or a configuration file to any terminal. Similarly, terminals may be managed by a different server each time they restart. The only reasons to install multiple Management Servers on one subnet are:

- You have many (more than 100) NCD ThinSTAR terminals on your subnet.
- Your Management Server has inadequate system resources to support multiple simultaneous software upgrades.

If you feel that multiple Management Servers are needed on the same subnet, please contact NCD Technical Support. They can assist you with planning and implementing the installation.

Installation Procedures

Both NCD ThinSTAR Operating Software and NCD ThinPATH Manager are on the product CD. You must install NCD ThinSTAR Operating Software first.

If error messages appear, see the *NCD ThinSTAR Terminal Administration Reference*.

Installing Over Prior Versions

You can install this software over previous versions of the same products.

If you are running beta software, remove it before beginning this installation. Remove NCD ThinPATH Manager, then NCD ThinSTAR Operating Software. If you are asked about locked files, select the **Reboot** option.

NCD ThinSTAR Operating Software Procedures

Install the Operating Software before installing NCD ThinPATH Manager.

Installing NCD ThinSTAR Operating Software

To install the Operating Software:

1. Go to the NCD ThinSTAR Management Server and close all running programs.
2. Load the CD.

The installation begins automatically. If autorun is disabled, you can run **NCDSetup.exe** from the CD.

3. Select **Install Products**.

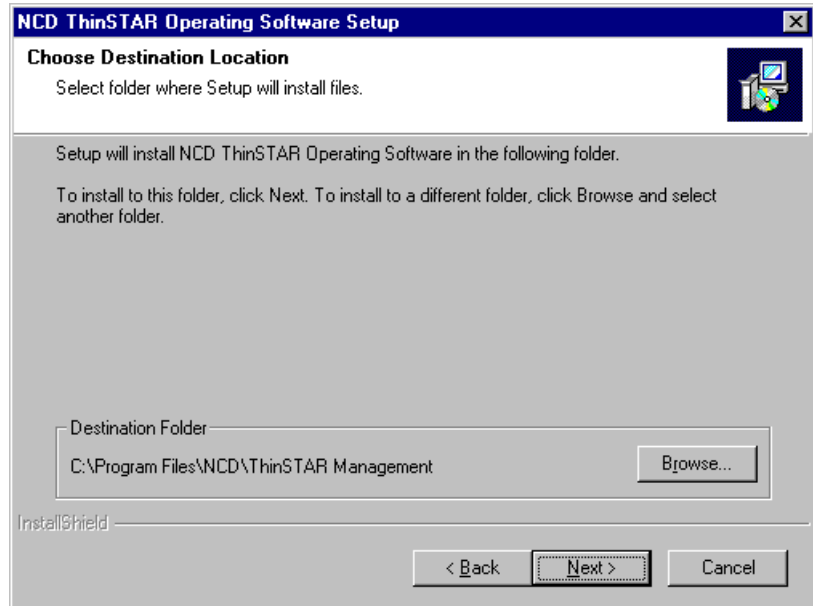


4. Select NCD ThinSTAR Operating Software.

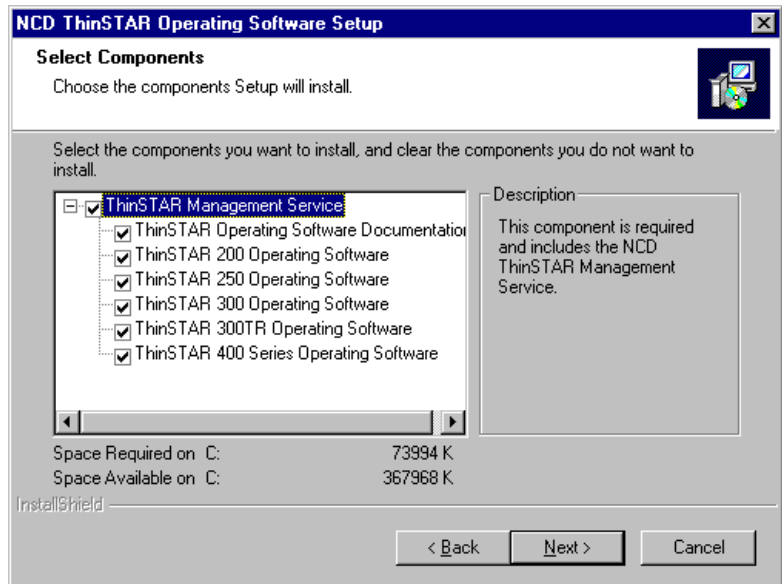


5. Acknowledge that you accept the license agreement, then click **Next** to continue when the setup program begins.

6. Choose where to install the software.



7. Choose the installation type and click **Next**.
 - A full installation installs documentation plus software for all NCD ThinSTAR terminal models.
 - A custom installation lets you choose components based on your site requirements. The items that are checked will be installed. Remove checks for items that you do not want to install.



8. Click **Finish**.

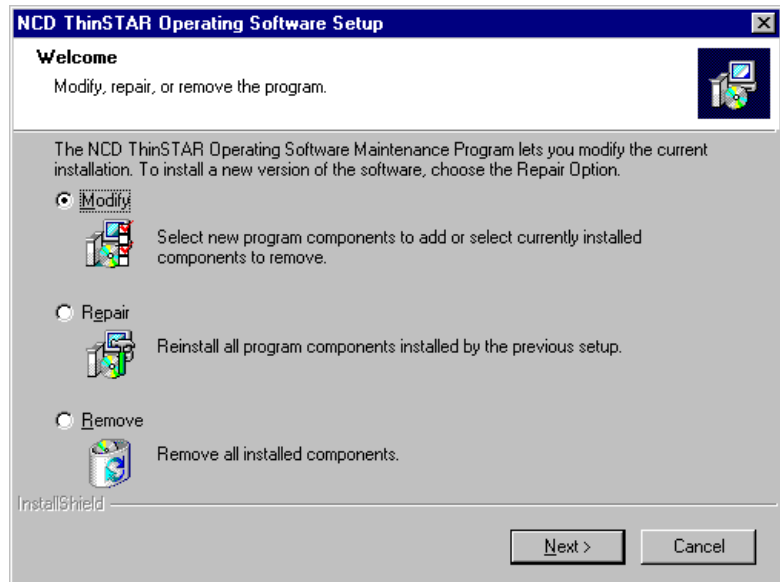
Modifying, Repairing, or Removing the Installation

If removing software, remove NCD ThinPATH Manager first (if installed), then remove NCD ThinSTAR Operating Software.

To modify, repair, or remove the installation:

1. Open the Windows Control Panel and select **Add/Remove Programs**, then select NCD ThinSTAR Operating Software.
2. Acknowledge that you accept the license agreement.
3. When the setup program is introduced, select an option and click **Next** to continue.

Options are as follows:



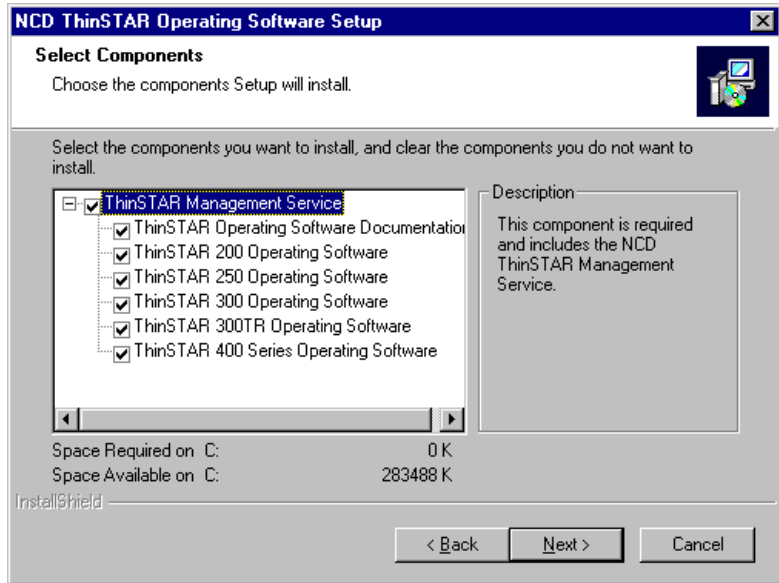
Modify lets you add or remove components after the initial installation.

Repair lets you reinstall the product, either the same version or a new version.

Remove deletes all files and menu items associated with the product.

— **Modify**

You can add or remove components. Each installed component is checked. For example, here all components are installed.



To remove a component from the installation, click it to toggle the selection off and remove the component. To add a component, check it.

Click **Next** to continue.

— **Repair**

This reinstalls all components of the current installation.

— **Remove**

This removes all installed components.

NCD ThinPATH Manager Procedures

You must install NCD ThinSTAR Operating Software before NCD ThinPATH Manager.

Installing NCD ThinPATH Manager

After installing NCD ThinSTAR Operating Software, you can install NCD ThinPATH Manager. This installation requires a license key.

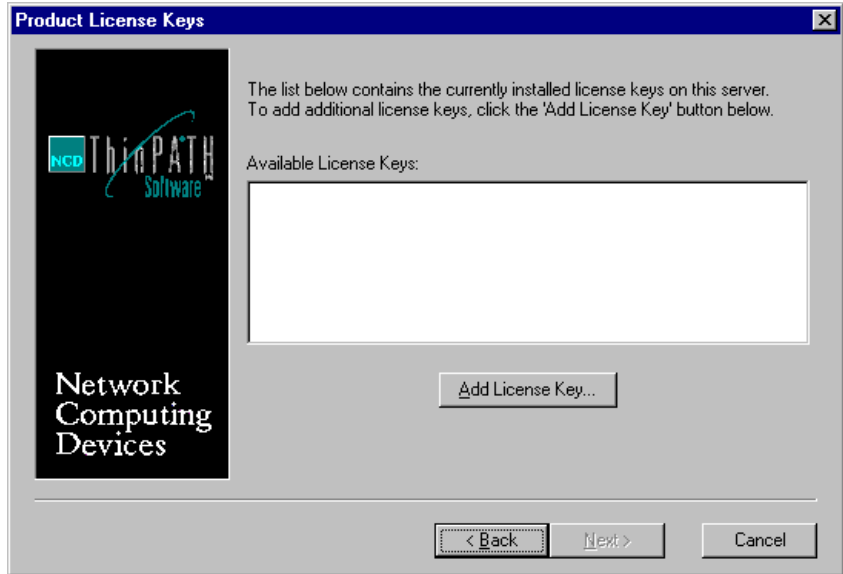
To install NCD ThinPATH Manager:

1. At the main installation menu, select **Install Products**.



2. Select NCD ThinPATH Manager.
3. Acknowledge acceptance of the license agreement, then click **Next** when the setup program is introduced.

4. Choose where to install the software.
5. Choose the installation type and click **Next**.
6. Enter the license key and click **Next**.



The first time you run the installation program, click **Add License Key**, then enter the license keys supplied and click **OK** before clicking **Next**.

Keep track of all your license keys; you will need them if you run the installation program again.

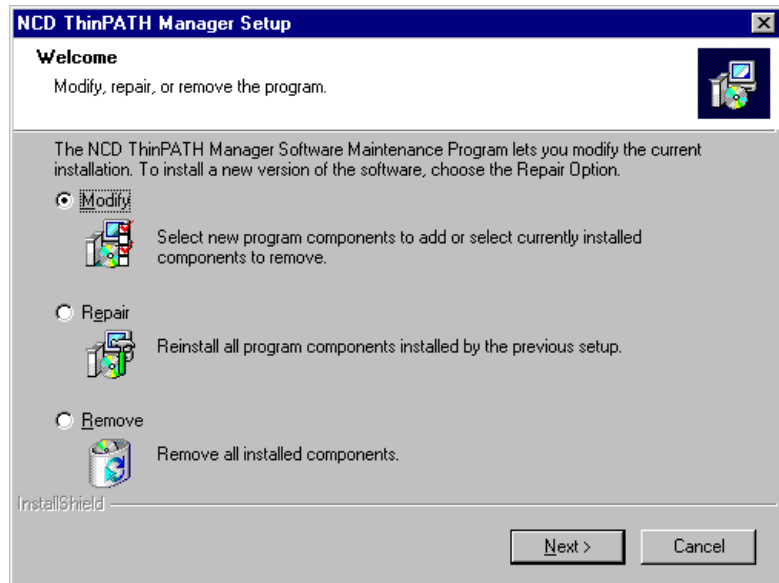
7. Click **Finish**.

Modifying, Repairing, or Removing the Installation

If removing software, remove NCD ThinPATH Manager first (if installed), then remove NCD ThinSTAR Operating Software.

To modify, repair, or remove the NCD ThinPATH Manager installation:

1. Open the Windows Control Panel and select **Add/Remove Programs**, then select NCD ThinSTAR Operating Software.
2. Select **Install Products**.
3. Select NCD ThinPATH Manager.
4. Acknowledge that you accept the license agreement.
5. When the setup program is introduced, select an option and click **Next** to continue. The options available are as follows:



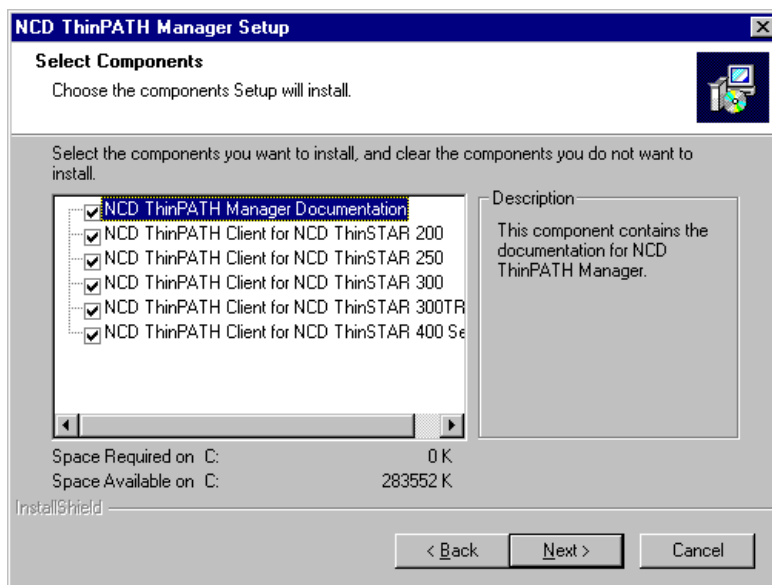
Modify lets you add or remove components after the initial installation.

Repair lets you reinstall the product, either the same version or a new version.

Remove deletes all files and menu items associated with the product.

— **Modify**

This presents a list of components with installed components checked. For example, here all components are installed.



To remove a component from the installation, click it to toggle the selection off; all unchecked components will be removed. To add a component, check it.

Click **Next** to continue.

— **Repair**

This reinstalls all components of the current installation.

— **Remove**

This removes all installed components.

Changing Policies to Include Web Configuration Tool

By default, the NCD ThinPATH Manager Web Configuration Tool is not installed on terminals because of its size. If your terminals have adequate flash memory and you want to install the Web Configuration Tool, change the upgrade policy setting for the tool in the NCD ThinSTAR Management Service (TMS).

To install the ThinPATH Web Configuration Tool on terminals:

1. Go to the Management Server and select **Start > Settings > Control Panel > ThinSTAR Manager**.
2. Select the terminal type.
3. Select **NCD ThinPATH Web Configuration** on the **Software** list and choose the **Upgrade if newer** policy.

When you restart terminals, as described in the *NCD ThinPATH Manager Centralized Startup Guide*, the Management Server downloads the Web Configuration Tool onto terminals.

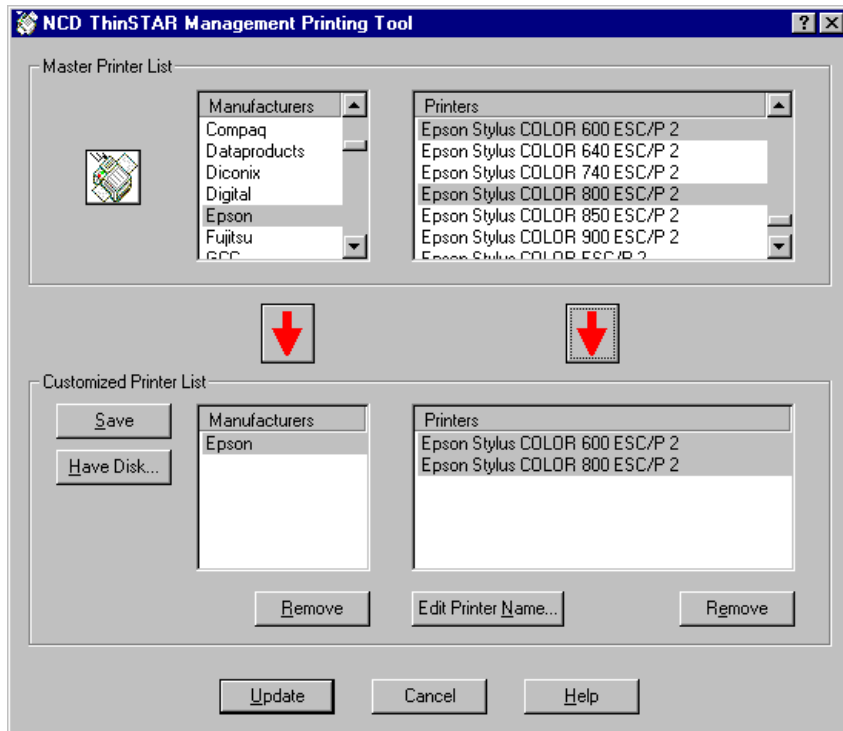
Defining Printer Connections

The new Microsoft Terminal Server 5.0 client includes local printer configuration for printing during Windows 2000 Server sessions. A list of available printers appears when you run the terminal setup wizard.

If you want to save flash memory on the terminal, you can use the NCD ThinSTAR Printing Tool on the Management Server to shorten the list and download it to terminals.

Note You can run this tool if you log onto a Windows 2000 or Windows NT 4.0 Server as a system administrator. However, terminals can only print during connections to Windows 2000 Servers.

In the following example, two Epson printers have been added to the customized list.



To create a customized list of printers for your site:

1. Select **Start > Programs > Administrative Tools (Common) > NCD ThinSTAR OS > NCD ThinSTAR Management Printing Tool**.
2. Select manufacturers and printers for your customized list.
 - All printers for a manufacturer
Select the manufacturer and click the down arrow under the list of manufacturers. Alternatively, you can drag and drop the manufacturer into the customized list.
 - A selection of printers
Select printers (using **SHIFT** + click for a continuous block or **CTRL** + click for random selections), then click the down arrow under the list of printers. Alternatively, you can drag and drop the selected printers into the customized list.

To remove a manufacturer and all of its printers from the customized lists, select the manufacturer and click **Remove**.

To remove a subset of a manufacturer's printers, select the manufacturer, then select the unnecessary printers and click **Remove**.

3. Click **Save** to save the customized list.
4. If you want to add a printer that is not on the master list, click **Have Disk** and browse to find the **.INF** file that defines the printer and its drivers.

The program adds the new printer to the custom list.

5. If you want to change the printer name provided, select the printer from the custom list and click on **Edit Printer Name**, or double click the printer name, then edit it and click **OK**.

Note Only change the printer name if you know that your Windows 2000 Server uses a different name for the device.

6. After defining the customized list, you can complete the custom printer database without updating terminals, or you can make the custom list available to terminals.
 - To create the new customized list without immediately making it available to terminals, click **Cancel**.
 - To make the customized list available to terminals, click **Update**.

When terminals restart, all existing terminal models receive the same customized printer list.

Setting Terminal Upgrade Policies

Upgrade policies determine whether a terminal's software is replaced.

The default policy for most components is to upgrade a terminal's software if the software on the Management Server is newer. One exception is the default policy for the NCD ThinPATH Manager Web Configuration tool; it is set to **Upgrade Disabled** because the tool requires significant flash memory space on a terminal.

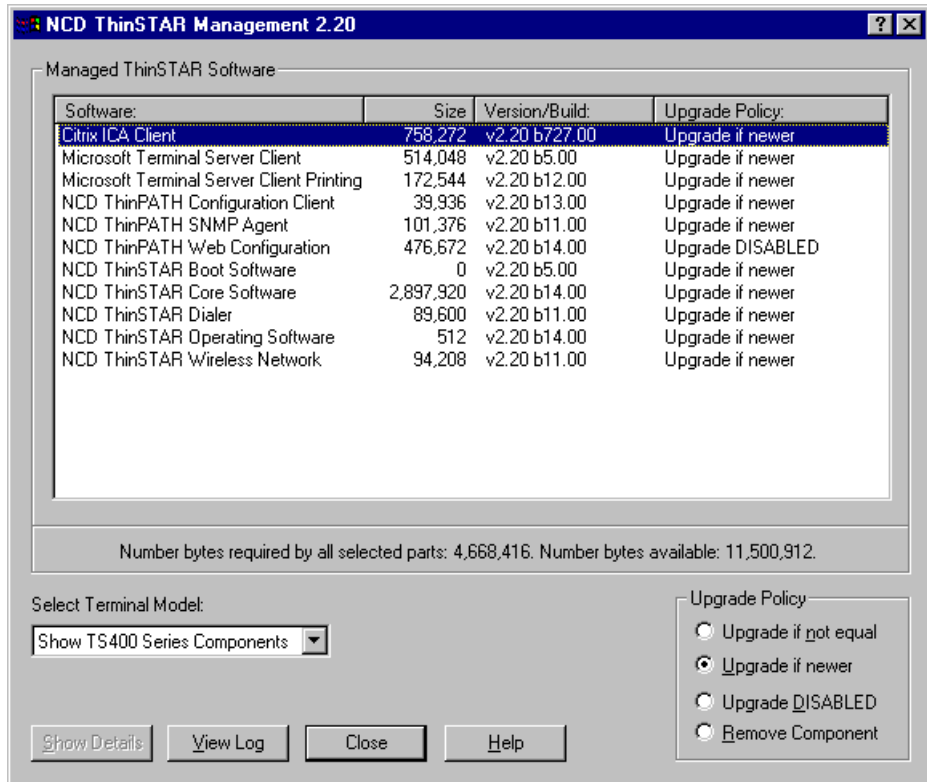
You can set different policies for each software component for a particular terminal model. The policy applies to all terminals of that model supported by that Management Server.

Terminal Upgrade Policies	
Upgrade if not equal	Operating Software and client software on the terminal are upgraded if newer or older than the software on the Management Server. With this policy, you can return to an earlier version or use a newer version.
Upgrade if newer	Operating Software and client software on the terminal are upgraded if the software on the Management Server is newer. With this policy, the terminal always runs the latest version of the Operating Software kept on the Management Server. This is the default value for most Operating Software components.
Upgrade DISABLED	The terminal's Operating Software and client software are not upgraded.
Remove component	The Management Server removes the software component from the terminal the next time it restarts. Use this policy to remove software that you no longer use, or to increase the amount of available flash memory. (In Terminal Properties, see Inventory > Hardware for flash memory.)

Setting Terminal Upgrade Policies

To set the upgrade policy for each component:

1. Open the Control Panel and click the **ThinSTAR Manager** icon.
2. Select the terminal model, then select a component and an upgrade policy for it as shown in the following example.

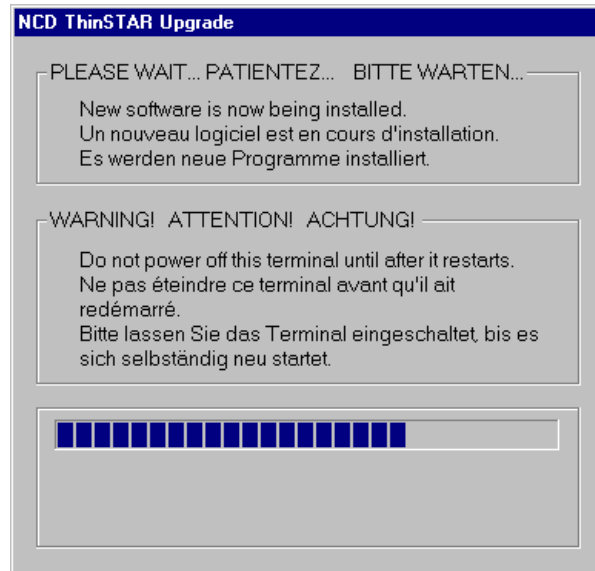


3. Click **Close** after setting policies for your terminal models.

When a terminal restarts, it displays an upgrade message while it replaces its software.



CAUTION. Do not turn the terminal off during an upgrade. Turning it off at this time may damage it, requiring a software recovery that will destroy the configuration that is currently defined.



As files are copied, file names are displayed in this area.

After the upgrade is complete, the terminal restarts automatically, without any changes to its configuration and connections. It may start a connection wizard or the Connection Manager.

Next Steps

After installing the software and adjusting upgrade policies (if necessary), you configure terminals.

■ If you installed only NCD ThinSTAR Operating Software ...

You can set up terminal properties and connections on each terminal.

For instructions, read the *NCD ThinSTAR Release Notes*, then go to the *NCD ThinSTAR Terminal Startup Guide*. The guide explains how to configure terminal properties and set up connections one by one. Additional reference information is in the *NCD ThinSTAR Terminal Properties Reference* and *NCD ThinSTAR Connection Reference*.

■ If you also installed NCD ThinPATH Manager ...

You will configure terminal properties and define connections from the Management Server.

For instructions, read the *NCD ThinSTAR Release Notes* and the *NCD ThinPATH Manager Release Notes*, then go to the *NCD ThinPATH Manager Centralized Startup Guide*. Reference information for the tools is in *NCD ThinPATH Manager Reference* and in online help.

The *NCD ThinPATH Manager Release Notes* explain how to add SNMP Services to make two **.DLL** files from SNMP Services available. NCD ThinPATH Manager needs these files to restart terminals remotely.

If your site uses SNMP to manage a network, you can configure the SNMP agent and enable it to change terminal properties. The full list of SNMP values is in **NCD-THINSTAR-MIB.txt**. By default, the directory containing this file is **\Program Files\NCD\ThinSTAR Management**.

Documentation

Documentation is available on the product CD and online in PDF format.

For online documents, select **Start\Programs\Administrative Tools (Common)**, then select **NCD ThinPATH Manager\Online Documentation** or **NCD ThinSTAR OS\Online Documentation**.

Documents are as follows.

Installation	
<i>Installation Guide</i>	Software installation for NCD ThinSTAR Operating Software and NCD ThinPATH Manager
NCD ThinSTAR	
<i>Terminal Startup Guide</i>	Individual terminal setup, terminal properties and connections.
<i>Release Notes</i>	Release-specific details and last-minute information.
<i>Terminal Administration Reference</i>	Automatic updating and recovery of NCD ThinSTAR Operating Software, troubleshooting, and a glossary.
<i>Connection Reference</i>	Information about creating and managing connections.
<i>Terminal Properties Reference</i>	Descriptions of terminal properties.
<i>User's Guide</i>	Description of the setup wizard with brief introduction to terminal properties and connections.
NCD ThinPATH Manager	
<i>Centralized Startup Guide</i>	Terminal setup from a central location, configuring terminal properties and connections for groups of terminals.
<i>Release Notes</i>	Release-specific details and last-minute information.
<i>Reference</i>	Information about NCD ThinPATH Manager tools, with a section on troubleshooting and a glossary.

Network Computing Devices
350 North Bernardo Avenue
Mountain View, CA 94043-5207

9300919

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