



Netfinity Director

# Installation and User's Guide





Netfinity Director  
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## **Second Edition (June 2000)**

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## 1

# Introduction

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IBM's Netfinity Director is an advanced Intel processor-based workgroup hardware manager, with centralized client and group management console and server services. With a single, consistent manageability interface for workgroup and enterprise management as well as point-to-point solutions, the JAVA-based graphical user interface is easy to learn and use.

The powerful and highly integrated workgroup hardware manager was developed with object-oriented tools to provide flexibility and extensibility, including Life Cycle Tools for added management over the entire life cycle of the asset.

A leader in technology, Netfinity Director 2.11 provides:

- **Upward Integration** — Enables customer to manage a heterogeneous environment with the enterprise tools already in place, protecting his investment
- **Life Cycle Tools** — Automates management processes and provides remote access to tasks, helping save time and money
- **Group Services** — Tasks are executed against groups of managed nodes, helping save time and money
- **Remote Control** — Access and control managed nodes remotely for troubleshooting and problem resolution, saving time and money and improving end user satisfaction
- **Browser Access to Agent** — Ubiquitous access to managed nodes simplifies management, helping save time and money

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## About this Guide

This guide will help you become more familiar with Netfinity Director and the relationship between Netfinity Director and Tivoli IT Director.

This guide is organized as follows:

- Chapter 1, "Introduction," contains an introductory overview of the purpose of Netfinity Director.
- Chapter 2, "Installing Netfinity Director," contains instructions on how to install, start, and exit from Netfinity Director. The instructions detail the installation of the program on different operating systems and how to uninstall the program.
- Chapter 3, "Netfinity Useability," covers the functions of the Netfinity Director console.
- Chapter 4, "Netfinity and Tivoli," describes the parallel functionality between Netfinity Director and Tivoli IT Director. Included in this chapter is Tivoli's IT Director User's Guide. The guide is to be used as a reference for Netfinity Director base functions.

# 2

## Installing Netfinity Director

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This section will step you through the installation process for installing Netfinity Director Management Server, Console and UM Services Client on supported operating systems.

### Before You Begin

Before you install Netfinity Director with UM Services on your client or server, consider the following:

- Supported Systems by Component
- Hardware Requirements
- Workgroup/Enterprise Integration

### Supported Systems by Component

Netfinity Director Management Server, which installs all Netfinity Director components, is supported on the following operating systems:

- Windows NT Server 4.0 (with Service Pack 4 or later)
- Windows 2000—Server or Advanced Server

The Netfinity Director Console component supports the same operating systems as Netfinity Director Management Server, including:

- Windows 2000 Professional
- Windows NT Workstation 4 (with Service Pack 4 or later)

- 
- Windows 98
  - Windows 95 (with OEM Service Release 2 (OSR2) or later)

The UM Services Client component is supported on the following operating systems:

- Windows 2000—Server or Advanced Server
- Windows 2000 Professional
- Windows NT Server 4.0 (with Service Pack 4 or later)
- Windows NT Workstation 4 (with Service Pack 4 or later)
- Windows 98
- Windows 95 (with OEM Service Release 2 (OSR2) or later)

**Note:** The UM Services Client component is installed directly on supported Microsoft operating systems through the main installation program. UM Services Client is also supported on other operating systems. See “Installing UM Services on other supported Operating Systems” on page 24.

## Hardware Requirements

Netfinity Director Management Server and Console require the following hardware, memory, and disk space:

- Pentium class processor, 200 MHz or faster
- 64 MB of random access memory (RAM)
- 150 MB of virtual storage
- 75 MB of free disk space
- A network adapter that supports the TCP/IP protocol. The adapter must support also NetBIOS, IPX, or SNA, depending on which transport is needed to communicate with the managed systems.

The UM Services Client for Netfinity Director in a Windows operating system requires the hardware, memory, and disk space:

- An IBM Netfinity server, IBM Desktops, IBM IntelliStation computer, or IBM ThinkPad mobile computer.

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**Note:** Client systems must support SMBIOS version 2.0 or higher.

- An Intel Pentium 200 MHz or faster processor.
- 75 MB of hard disk space on the client systems.
- A minimum of 32 MB random access memory (RAM).

## Workgroup/Enterprise Integration

Netfinity Director installation allows you to install UM Services as an integrated systems-management solution for a supported systems-management console application. Detailed information about the appropriate environments for integration can be found in the *UM Services Installation and User's Guide*, included on the Netfinity Director with UM Services CD-ROM.

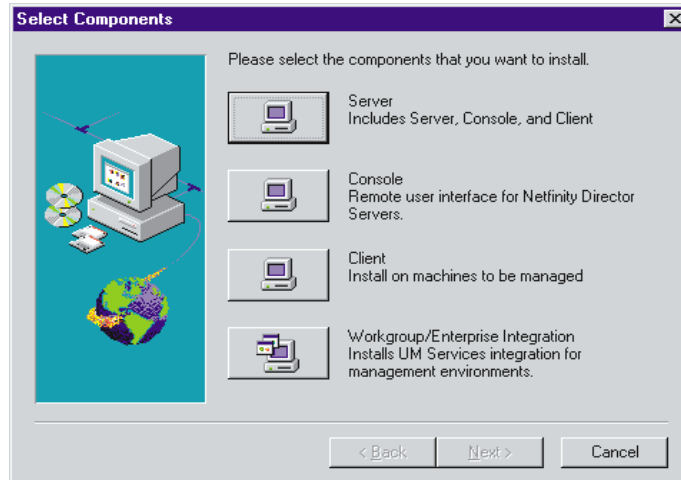
## Installing Netfinity Director 2.12 on supported Microsoft operating systems

This section details the steps necessary for installing Netfinity Director components on supported Microsoft operating systems. For the installation of client-based components on other supported operating systems, see “Installing UM Services on other supported Operating Systems” on page 24.

To install Netfinity Director components (Server, Console, and Client) on supported Microsoft Windows operating systems, do the following.

1. Place the *Netfinity Director with UM Services* CD-ROM in the CD-ROM drive of the machine to which you will be installing.
2. Click **Start**→**Run**.
3. In the **Open:** field, type `X:\win32\install\Ibmsetup.exe` where *X* is the location of the CD-ROM drive.
4. Click through the **Welcome** window and accept the License Agreement.

The **Select Components** window opens.



There are four different installation choices from the **Select Components** window:

**Server** Install the files for the Server, Console, and Client.

**Console** Install the remote user interface for Netfinity Director Servers.

**Client** Install the Client files on Microsoft operating systems only. For other managed operating system environments, see “Installing UM Services on other supported Operating Systems” on page 24.

#### **Workgroup/Enterprise Integration**

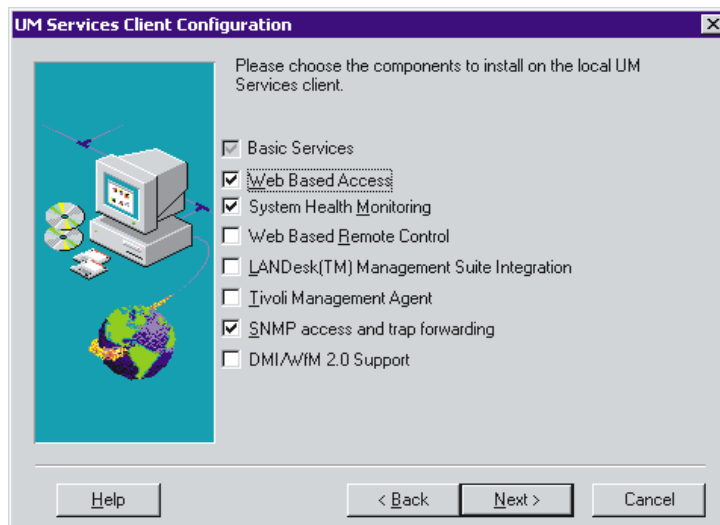
Install UM Services integration for management environments. See the *UM Services Installation and User’s Guide*, provided on the Netfinity Director with UM Services CD-ROM, for complete information.

## **Installing the Server Files**

Selecting **Server** from the **Select Components** window installs the files for the Server, Client, and Console. Take the following steps:

1. Click the **Server** button from the **Select Components** window.

The **UM Services Client Configuration** window opens.



Check the checkbox beside any components that you want to install on the client system.

**Note:** The first component listed, Basic Services, is selected by default and cannot be deselected. Basic Services installs a Java Virtual Machine, a Common Information Model (CIM) repository, and basic instrumentation for gathering hardware inventory data. The inventory information provided by Basic Services can be viewed through a CIM browser such as Microsoft WBEMTEST. Basic Services must be installed on all Netfinity Director managed UM Services clients.

The following optional components are available. The components that are selected by default are indicated as such:

#### **Web Based Access (Default)**

Web Based Access offers a convenient Java-based tool for managing a client system and for viewing the CIM-based inventory data. If you install Web Based Access, a hypertext transport protocol (HTTP) daemon is installed and requires that a user name and password be entered during the installation. The user name and password are

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used to limit access to the HTTP daemon. With Web-based Access that is installed on the client system, the client can be managed from any remote computer with a supported Web browser. No software other than a Web browser is needed on the remote system.

### **System Health Monitoring (Default)**

System Health Monitoring provides active monitoring of critical system functions, such as disk space available, SMART Drive alerts, system temperature, fan functionality, power supply voltage, and system cover removal (dependent upon the hardware options of a selected managed system) . System Health Monitoring enables you to detect system problems early, before system failures occur. System administrators are notified of a system problem by a CIM event, SNMP trap (SNMP traps are available only if SNMP access and trap forwarding is also selected), or SMS Status Message (Microsoft SMS 2.0 only). Critical problems also result in a pop-up message by appearing on the display of the client system.

### **Web Based Remote Control**

Web Based Remote Control enables a remote systems administrator using a Web browser or MMC console to take control of the client system desktop, enhancing the administrator's ability to diagnose system problems and troubleshoot the system.

**Note:** You must install the Web Based Access component to install the Web Based Remote Control component.

### **LANDesk Management Suite Integration**

LANDesk Management Suite Integration installs the Intel Common Base Agent on the client system. This enables the systems administrator to use UM Services with LANDesk Management Suite.



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### **Tivoli Management Agent**

Tivoli Management Agent installs support on the client system that enables it to be managed by the Tivoli Enterprise systems-management platform.

### **SNMP access and trap forwarding**

This feature enables CIM information to be accessed from a system that use the Simple Network Management Protocol (SNMP). If System Health Monitoring is enabled, this option also enables System Health to forward CIM events as SNMP traps. This component requires that you have the SNMP service (provided with the operating system) installed on the endpoint. If the SNMP service is not installed, the system prompts you to insert the operating system installation media and install SNMP during the UM Services installation.

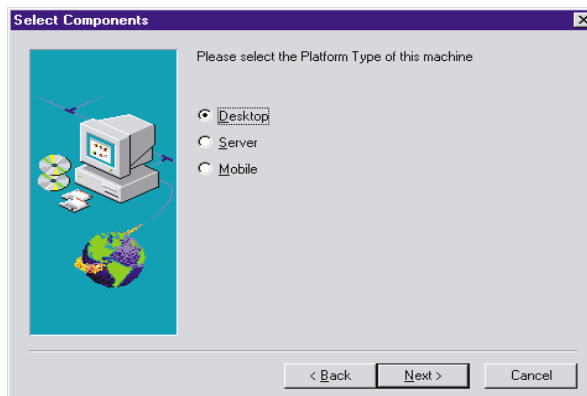
### **DMI Support**

Selecting this component installs the Desktop Management Interface (DMI) 2.0 compliant Service Provider. When enabled, this feature maps a managed system CIM data and events to DMI.

2. After you select the components you want to install, click **Next** to continue.

The following steps are dependent on the selections that are made in the UM Services Client Configuration menu.

3. If you selected **DMI Support** from the UM Services Client Configuration menu, the **DMI Platform** window opens.



Select the type of platform you are installing the DMI support to. Click **Next** to continue.

4. The **User ID** window opens. Use this window to set the user ID and password for the client system and to specify the TCP/IP port that is used to access the client.

You must provide a unique user ID and password for the client system. To use the UM Services console to manage this system, you must first provide a valid user ID and password before being allowed access to the system. Type in the **User ID** field the user ID. Then type the password in the **Password** field, and type the password again in the **Confirm Password** field.

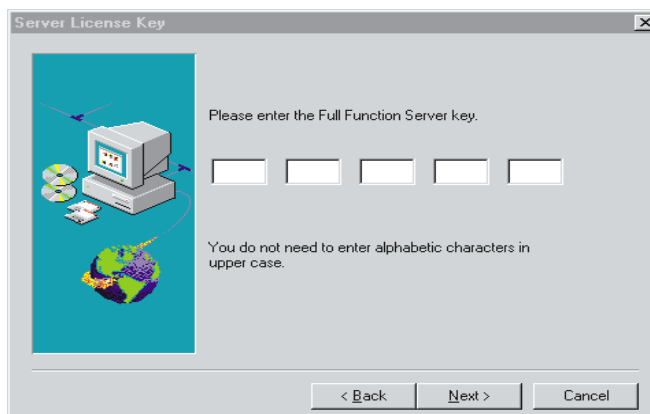
**Note:** The user ID and password are case sensitive.

Then, select a TCP/IP port that is used to access the UM Services console. The default port is 411. If this port is not available, you can select port number 6411, 6500, 6600, or 6611. Make sure that other TCP/IP applications do not use the selected port. Click **Next** to continue.

5. If you selected **SNMP access and trap forwarding** from the UM Services Client Configuration menu and do not have the SNMP network service installed, Netfinity Director installation will prompt you with an SNMP installation query.
  - Click **No** to continue with the Netfinity Director installation without installing the SNMP network service.

- Click **Yes** to install the SNMP network service on the server. The Installing SNMP window and your Network window opens. Follow the directions for installing SNMP. When the Windows operating system prompts you to restart, click **No**. In the Installing SNMP window, click **Next** to return to the Netfinity Director installation program.
6. The system asks you if you want to add a Netfinity Director icon to the **Start** menu. Click **Yes** or **No** depending on whether you want an icon on the **Start** menu.

The **Server License Key** window opens.



7. Enter the license key that was provided for you. The license key is *not* case-sensitive.
8. Click **Next**.  
The **Choose Destination Location** window opens for the location of the Netfinity Director files.
9. Click **Next** to accept the default directory (**C:\Program Files\IBM\Director\**), or click **Browse** to choose a different directory.

The **Choose Destination Location** window opens again. This time a directory needs to be specified for a Software Distribution packages creation directory.

- 
10. Click **Next** to accept the default directory (**C:\Program Files\IBM\Director\SwDistPk**), or click **Browse** to choose a different directory.

After creating the Software Distribution packages directory, another **Choose Destination Location** window opens. This directory will be the location for Software Distribution packages that are installed on this system.

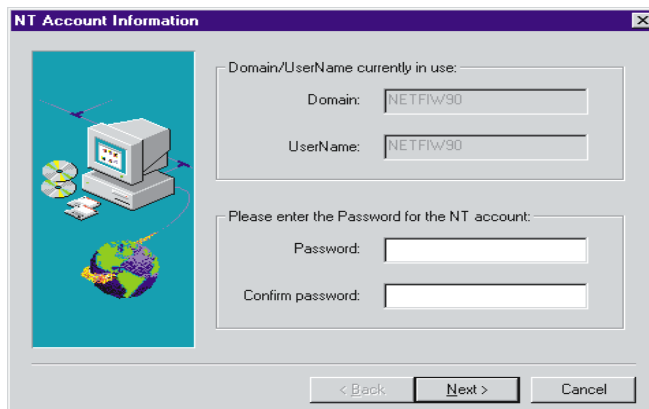
11. Click **Next** to accept the default directory (**C:\Program Files\IBM\Director\SwDistPk**), or click **Browse** to choose a different directory.
12. The system asks you if you want to install files for remote control. Select **Yes** or **No**.
13. The system asks you if you want to install files for TMR Gateway. Select **Yes** or **No**.

- Select **Yes** if there is Tivoli management agent software that is installed on the network. The agents discover Netfinity Director through the TMR Gateway, and Netfinity Director downloads the Netfinity Director component of UM Services to the Tivoli agents.

**Note:** The complete UM Services package is not installed using this process. If you choose this option, you must install UM Services separately.

- Select **No** to continue the installation process for Netfinity Director and UM Services.

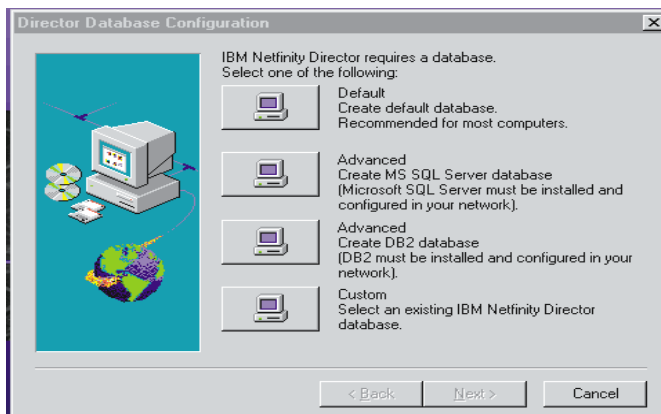
The system begins installing the necessary files. Then the **Account Information** window opens.



The Domain and User Name for the machine you are using are displayed.

14. Enter your account password in the **Password** field and enter it again in the **Confirm Password** field.
15. Click **Next** to continue.

The **Director Database Configuration** window opens.



16. Select the button next to the appropriate database for the installation.

**Default** Creates a default database. This option is recommended for most users.

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### Advanced (MS SQL)

Selection creates an MS SQL Server database. A Microsoft SQL Server database must be installed and configured for the network.

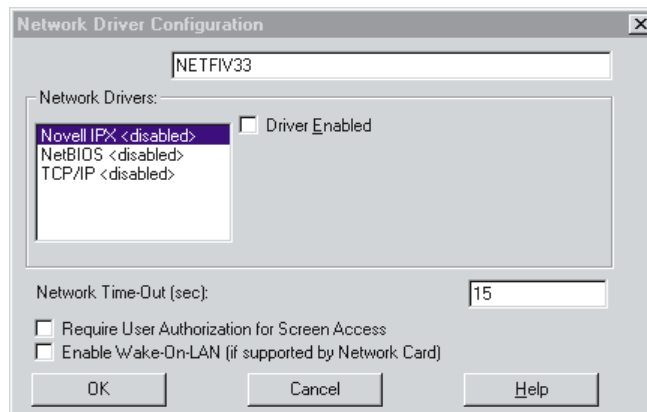
### Advanced (DB2)

Selection creates a DB2 database. DB2 must be installed and configured in the network.

**Custom** Select an existing IBM Netfinity Director database.

**Note:** If you already have a database installed, the system allows you to use that database.

The **Network Driver Configuration** window opens.



This window defines the network transport options for a Netfinity Director Server. The options are:

- **System Name** - The name of the Netfinity Director Server.
- **Network Drivers** - The box lists all network transport protocols defined in the system protocol list. They appear as either enabled or disabled. To enable a network transport for use with Netfinity Director, click on the driver name and check the **Driver Enabled** box.
- **Network Address (for NetBIOS only)** - This is the NetBIOS network name.
- **Network Time-out (sec)** - 15 seconds is the default time-out.

- 
- **Require User Authorization for window Access** - Check this box if you want users to be able to control remote access to their systems.
  - **Enable Wake On-LAN** - Check this box if the network card supports Wake On-LAN.
17. Enable the appropriate network drivers by selecting the driver from the **Network Drivers** list and check the **Driver Enabled** checkbox.
  18. You may change the Network Timeout if desired.
  19. Select the **Require User Authorization for window Access** checkbox if you want to give client users the authority to deny the system administrator remote control access to their machines. This option allows users to control who accesses their machines.
  20. Select the **Enable Wake On-LAN** checkbox if the server has Wake On-LAN capability.
  21. Select **OK** to continue.  
When the installation is complete, the **Setup is Complete** window opens.
  22. Restart the computer now or Restart later. If you choose **Restart Now**, the system shuts down and restarts immediately. If you choose **Restart Later**, the installation program closes. However, you must restart and log in to the system to begin using Netfinity Director.

## Installing the Netfinity Director Console

Select the **Console** button from the **Select Components** window to install the Console files only. Take the following steps:

1. Select **Console**.  
The **Choose Destination Location** window opens.
2. Click **Next** to accept the default directory (**C:\Program Files\IBM\Director\**), or click **Browse** to choose a different directory.  
The necessary files are installed on the system.

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The **Setup is Complete** window opens.

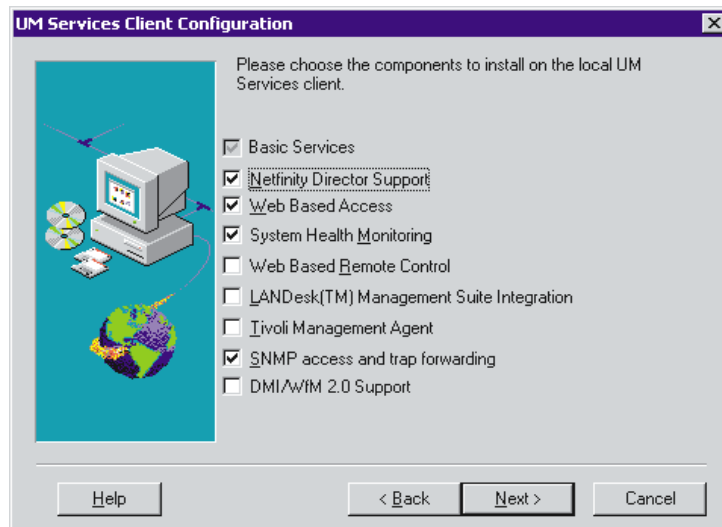
- Restart the computer now or Restart later. If you choose **Restart Now**, the system shuts down and restarts immediately. If you choose **Restart Later**, the installation program closes. However, you must restart and log in to the system to begin using Netfinity Director.
- Click **Finish**.

## Installing the UM Services Client for Netfinity Director

Select the **Client** button from the **Select Components** window to install the Client files only. Take the following steps:

- Select **Client**.

The **UM Services Client Configuration** window opens.

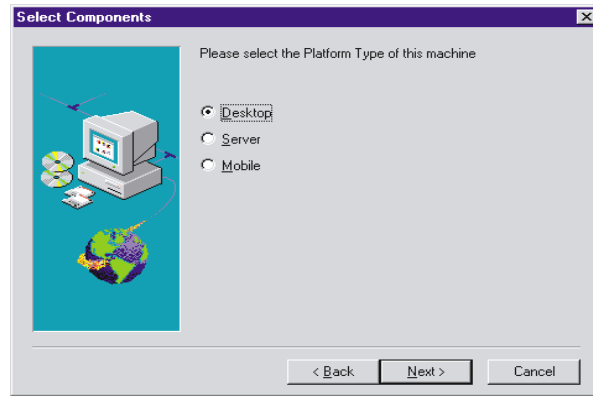


- Check the checkbox beside any of the components you want to install on the client system. All of the components, except for Netfinity Director Support, are described under “Installing the Server Files” on page 6. For an explanation of these components see pages 7-9.



Netfinity Director support is an additional configuration option for the client installation only. IBM Netfinity Director is an advanced Intel processor-based workgroup hardware manager, with centralized client and group management console and server services. Selecting this feature enables the system to be managed in a Netfinity Director environment by installing a Netfinity Director Client on this system.

3. Click **Next** to continue.  
The **Choose Destination Location** window opens.
4. Click **Next** to accept the default directory (**C:\Program Files\IBM\UMS\**), or click **Browse** to choose a different directory.
5. If you selected **DMI Support** from the UM Services Client Configuration menu, the **DMI Platform** window opens.



Select the type of platform you are installing the DMI support to. Click **Next** to continue.

The **User ID** window opens.

6. Use this window to set the user ID and password for the client system and to specify the TCP/IP port that is used to access the client.

You must provide a unique user ID and password for the client system. To use the UM Services console to manage this system, you must first provide a valid user ID and password before being allowed access to the system. Type in the **User ID** field the user ID.

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Then type the password in the **Password** field, and type the password again in the **Confirm Password** field.

**Note:** The user ID and password are case sensitive.

Then, select a TCP/IP port that is used to access the UM Services console. The default port is 411. If this port is not available, you can select port number 6411, 6500, 6600, or 6611. Make sure that other TCP/IP applications do not use the selected port.

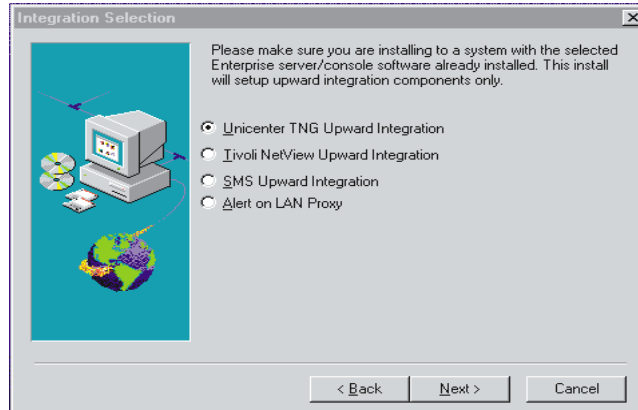
7. Click **Next** to continue.
8. If you selected **SNMP access and trap forwarding** from the UM Services Client Configuration menu and do not have the SNMP network service installed, Netfinity Director installation will prompt you with an SNMP installation query.
  - Click **No** to continue with the Netfinity Director installation without installing the SNMP network service.
  - Click **Yes** to install the SNMP network service on the server. The Installing SNMP window and your Network window opens. Follow the directions for installing SNMP. When the Windows operating system prompts for a restart, click **No**. In the Installing SNMP window, click **Next** to return to the Netfinity Director installation program.
9. The system asks you if you want to place an UM Services icon on the start menu. Select **Yes** or **No**.
10. The system asks you if you want to install files for remote control. Select **Yes** or **No**.
11. The system asks you if you require user authorization for remote control window access. Select **Yes** or **No**.

The system begins installing the necessary files. The **Setup is Complete** window opens.
12. Restart the computer now or later. If you choose **Restart Now**, the system shuts down and restarts immediately. If you choose **Restart Later**, the UM Services installation program closes. However, you must restart and log in to the system to begin using Netfinity Director.

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## Installing Workgroup/Enterprise Integration

Select the **Workgroup Enterprise Integration** button from the **Select Components** window to install the UM Services integration for management environments. The **Integration Selection** window opens.



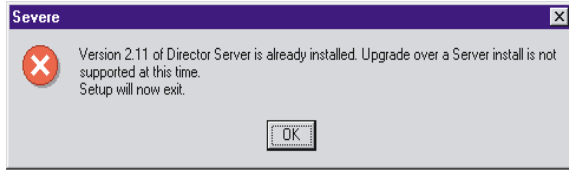
For information on the Workgroup/Enterprise Integration option, refer to Upward Integration Modules chapter of the *UM Services Installation and User's Guide*.

## Upgrading Netfinity Director 2.11 to Version 2.12

The installation program checks for a previous version of Netfinity Director and, depending on the type of installation, upgrades the necessary Netfinity Director components.

### Upgrading the Netfinity Director Server

You cannot upgrade Netfinity Director Management Server from this installation program. After the Welcome and End User License Agreement windows, installation detects the previous version of the Netfinity Director Management Server and this prompt appears.



Click **OK** to quit the installation program. You must uninstall Netfinity Director Management Server before installing this newer version.

**Note:** If you have IBM UM Server Extensions or Update Connector Manager installed, you must first uninstall these tools before you remove the Netfinity Director Management Server. Refer to the *UM Server Extensions User's Guide* and the *Update Connector Manager User's Guide* for the removal of these products.

To remove Netfinity Director, version 2.11:

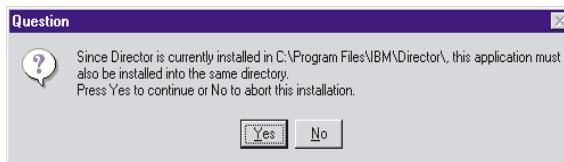
1. Click **Start**→ **Settings**→ **Control Panel**→ **Add/Remove Programs**. Then select **Netfinity Director**.
2. The system displays a message that reminds you that Netfinity Director must be closed before you can continue.
3. The system displays a message that verifies that you want to delete the configuration data and database content.

The uninstallation program is automated and prompts you when the process is finished.

4. Restart the computer now or Restart later. If you choose **Restart Now**, the system shuts down and restarts immediately.

## Upgrading the Netfinity Director Console

After the Welcome and End User License Agreement windows, installation detects the previous version of the Netfinity Director Console and this prompt appears.



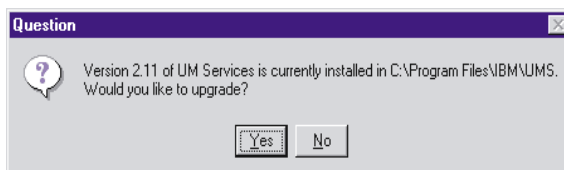
Click **Yes** to upgrade the console. The upgrade follows the previous installation path upgrading existing software, removing obsolete files and directories, and installing the new console components.

Restart the computer now or later. If you choose **Restart Now**, the system shuts down and restarts immediately. If you choose **Restart Later**, the UM Services installation program closes. However, you must restart and log in to the system to begin using Netfinity Director.

## Upgrading the Netfinity Director Client

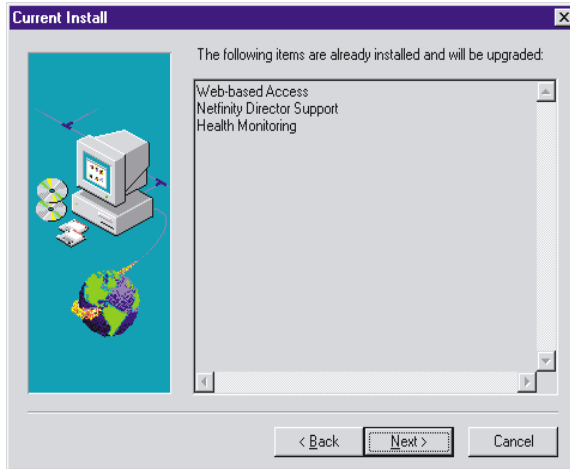
To upgrade the Netfinity Director Client for a selected system, do the following:

1. After the Welcome and End User License Agreement windows, installation detects the previous version of the Netfinity Director Client and the upgrade prompt appears.



Click **Yes** to begin.

2. Installation detects the client components from the previous version of the installed UM Services client. The Current Install window opens.



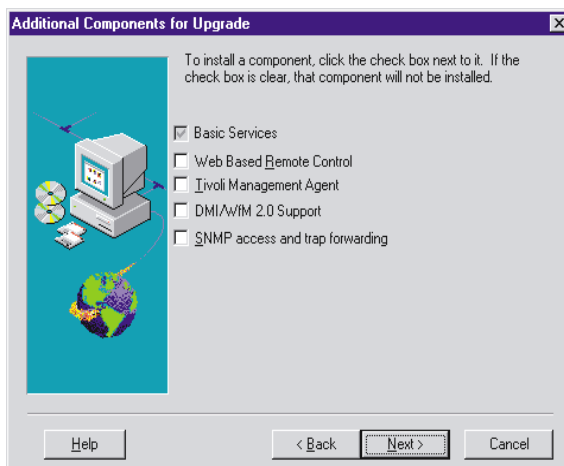
**Note:** Installation will not upgrade the following components that are installed from UM Services, version 2.11.

- LANDesk Management Suite Integration
- Tivoli Management Agent

UM Services Client, version 2.12, offers newer version of these components. To install the newer versions, you must first uninstall the previous UM Services client.

Installation upgrades the client components listed in this window. Click **Next** to continue.

3. The Additional Components for Upgrade window opens.



Select additional components to add to the upgraded components of the UM Services Client. Click **Next** to continue.

4. Depending on which additional components you add, the upgrade program will prompt you for additional responses. For more information about these prompts, see “Installing the UM Services Client for Netfinity Director” on page 16.
5. A prompt to add UM Services icons appears. If you have icons from the previous version, clicking **No** will not remove the icons. Clicking **Yes** will not add additional icons to those previously installed.
6. The program now upgrades the existing components and installs the selected new components. Restart the computer now or later. If you choose **Restart Now**, the system shuts down and restarts immediately. If you choose **Restart Later**, the UM Services upgrade program closes. However, you must restart and log in to the system to begin using Netfinity Director.

---

# Installing UM Services on other supported Operating Systems

Netfinity Director, as a highly integrated workgroup hardware manager, allows you to manage a heterogeneous environment through the use of the Netfinity Director Client.

You can install the Client on a Microsoft Windows system as part of the Netfinity Director installation. For OS/2, Netware, and SCO UnixWare systems that are managed by Netfinity Director, use the *Netfinity Director with UM Services* CD-ROM directly to install the Client.

## Supported Operating Systems

The following operating systems and versions are supported:

- OS/2 3.0 and 4.0 with Service Pack 5 and Warp Server for eBusiness
- NetWare 4.1 or NetWare 4.11 (with Service Pack 5 or higher), NetWare 5.0 (with Service Pack 1 or higher)
- SCO UnixWare 7.1 (with SCO UnixWare Patch ptf7441a) or SCO UnixWare 7.1.1
- Microsoft Windows 95, Windows 98, Windows NT 4.0 (Workstation or Server), and Windows 2000 Professional and Server

## Attended Installation of the Netfinity Director Client for OS/2

To install the Netfinity Director Client software on an OS/2 3.0, 4.0, or Warp Server for eBusiness system:

1. Insert the *Netfinity Director with UM Services* CD-ROM into the CD-ROM drive of the system.
2. Change the directory to the **x:\os2** subdirectory, where *x*: is the drive letter of the CD-ROM drive.
3. Run **setup.cmd** to start the installation utility.



- 
- The default location of the Netfinity Director Client files is displayed in the **Directory to Install** from field. Unless you have moved the files to another location, simply accept the default. Otherwise enter the drive letter and file path location where the Client files are located.

A subdirectory, **\SwPkInst**, is automatically created in the selected directory, where software distribution packages will be placed on the system for installation.

- The default target location for the Client files is **c:\TivoliWg\**. If you want to install the files in another location, replace the default drive and file path with the alternative location.
- Select the **remote control Client** option if you want to enable the desktop of the local system to be taken over from a remote location. Refer to the Tivoli IT Director section, “Remote Control,” for more information.
- Select **Install**. The files are copied to the specified directory. You can cancel the installation at any point by selecting **Cancel**.
- You should then see the **Network Driver Configuration** dialog. Enter a name for the system in the **System Name** field. The Netfinity Director administrator uses this name to identify this system on the network.
- Click on one of the available network drivers the managed system uses to communicate with the Netfinity Director management server.

When you select **NetBIOS**, a default network address is assigned. You can change this address, but ensure that the name you specify is 1 to 12 characters in length and unique on the network, otherwise, the managed system cannot start properly. Note that this address is case sensitive.

- Select **Driver Enabled** to activate the network driver when the system starts. If the system has multiple network drivers available, you can select another driver at this point and repeat the steps for this dialog.
- The **Network Time-Out** value specifies the number of seconds the Netfinity Director management server attempts to establish

---

communication with this system if it is not responding. You may not need to change the default setting.

12. The **Require User Authorization for window Access** option enables you to specify whether a remote user can access, and take over control of, the local system without the local user's permission. If this option is enabled and a Netfinity Director administrator attempts to use remote control to access the local system, a message window is displayed on the local system indicating that a remote user is attempting remote control access. You can then allow or disallow access. Refer to the Tivoli IT Director section, "Remote Control" for more information on using this service.
13. When you have finished, click **OK** to save the settings.
14. The installation utility displays the changes that must be made to the **config.sys** and **startup.cmd** files. Select **Yes** if you want the installation utility to automatically include the configuration entries in these files. Select **No** to store the changes in **config.new** and **startup.new** instead.

**Note:** The changes must be included in **config.sys** and **startup.cmd** for the Netfinity Director managed system to run correctly. If you select **No**, you must add the entries manually.
15. Installation is now complete, click **OK** to save the settings.

## Unattended Installation of the Netfinity Director Client for OS/2

Netfinity Director supports unattended installations, meaning that you do not have to be present to provide responses to the various prompts during the installation process. Instead, a response file is automatically read, and the installation proceeds normally.

The response files for the unattended installation for OS/2 are included in the OS/2 language subdirectory. For example, the sample English language response file, DirServ.rsp, is located in the **x:\win32\install\files\NfD\Agent\OS2\en\** subdirectory, where **x:** is the drive letter of the CD-ROM drive.

---

Comments within the response files begin with a semicolon in the first column. All entries can be changed. The response file contains comments that detail the usage of each entry.

To launch an unattended installation of the OS/2 Client, do the following:

1. Copy and modify the sample response file (**DirAgent.rsp**).
2. Change the directory to the **x:\win32\install\files\Nfd\Agent\OS2\** subdirectory, where **x:** is the drive letter of the CD-ROM drive.
3. Run **setup.cmd** to start the installation utility:  
**install.exe /R:filename** (where *filename* is the fully-qualified response file)

## Installing the Netfinity Director Client for Netware

### Notes:

- Do not install the Netfinity Director Client on a NetWare system running Netfinity Manager. Netfinity Manager has to be commented out of **Autoexec.ref**.
- Netfinity Director Client is only supported in NetWare 4.10, 4.11 and 5.0.
- The client system for the Netfinity Director Client must be currently logged into the Novell NetWare Server.

To install the Netfinity Director Client software on a Novell NetWare system:

1. Insert the *Netfinity Director with UM Services* CD-ROM into the CD-ROM drive of the system.
2. Change the directory to the **x:\Netware** subdirectory, where **x:** is the drive letter of the CD-ROM drive.
3. Run **setup.bat**.
4. Select the appropriate drive that is mapped to the **sys volume** of the targeted Novell server.
5. The target location for the client files is the **\tivoliwg** directory.

- 
6. It copies the necessary files, and adds the following lines to the Autoexec.ncf file:

```
 ;*****Tivoliwg IT Director Agent*****
Search add sys:tivoliwg
load twgipc
;*****Tivoliwg IT Director Agent*****
```
  7. The final window is displayed, listing several manual tasks the user must perform before this application is used:
    - Type the following:  
**Search add sys:tivoliwg**
    - Start the client by loading **twgipc**
    - Configure the Netfinity Director client by loading **twgipccf**

Installation is now complete. The client automatically runs on the next Novell server boot.

## Installing Netfinity Director Client for SCO UnixWare

To install the Netfinity Director Client on a SCO UnixWare system, you must install both the Server Extensions and the UnixWare Lightweight Client.

Before installing the Netfinity Director Client for SCO UnixWare, these conditions must first be met:

- SCO UnixWare 7.1 or 7.1.1 is installed on the client system.
- SCO UnixWare 7.1 Patch ptf7441a must be applied to the client

To install the UnixWare Lightweight Agent for each SCO UnixWare Client, do the following.

1. At the SCO UnixWare system you want to manage, open the command line program.
2. Type **#mount /cdrom**.
3. Type **#cp /cdrom/sco7.1/uagent.pkg /temp**.
4. Type **#pkgadd -d /temp/uagent.pkg**.

---

SCO UnixWare installs the Netfinity Director UnixWare Lightweight Agent.

5. Type **#umount /cdrom** to finish the installation.

Netfinity Director will recognize this SCO UnixWare system as a client on the next discovery. Netfinity Director will recognize this SCO UnixWare system as a client on the next discovery. Unix Agents are secure by default.

Consequently, when they are first discovered by the Netfinity Director Management Server, the managed client name appears with a lock icon. To gain access, right-click on the locked system and select **Request Access** from the pop-up menu. Enter the appropriate user name and password. This clears the secure machine function.

## Uninstalling Netfinity Director

Before you remove Netfinity Director, if you have the UM Server Extensions installed, you must first uninstall the extension tools. For information on the UM Server Extensions, refer to the *UM Server Extensions User's Guide*.

To remove Netfinity Director:

1. Click **Start**→**Settings**→**Control Panel**→**Add/Remove Programs**. Then select **Netfinity Director**.
2. The system displays a message that reminds you that Netfinity Director must be closed before you can continue.
3. The system displays a message that verifies that you want to delete the configuration data and database content.

The uninstallation program is automated and prompts you when the process is finished.

4. Restart the computer now or Restart later. If you choose **Restart Now**, the system shuts down and restarts immediately.

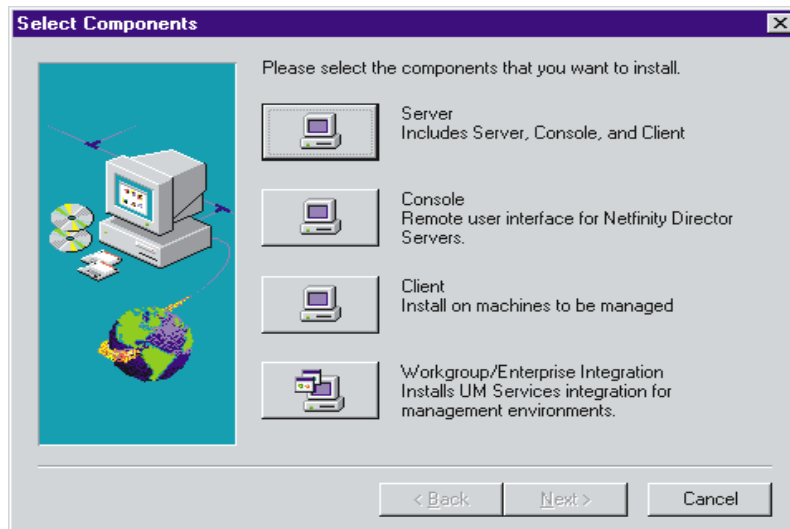
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# 3

## Using the Features of Netfinity Director

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Netfinity Director is based upon the ease of use and base functionality of Tivoli IT Director. While not including all the features of a complete IT Director package, Netfinity Director still delivers advanced systems management for your network environment. Also, Netfinity Director users can upgrade to IT Director seamlessly to receive the full benefits of Tivoli systems management.



---

## Using the Netfinity Director Interface

The Netfinity Director Management Server manages systems by communicating with the UM Services Client, installed on the managed systems. Netfinity Director allows you to create events, receive CIM data, and define tasks for groups of managed systems.

For more information on creating simple tasks, events or other basic programmatic features, consult the *Tivoli's IT Director User's Guide* (QW09EXE.PDF) provided on the Netfinity Director with UM Services CD.

## Using Netfinity Director Tasks

While containing IT Director basic capabilities, Netfinity Director includes some features for added systems management. This chapter highlights the Netfinity Director tools that you can use to manage your IBM Netfinity Servers.

The following system management tasks are discussed in this chapter:

- “Using the Asset ID Task” on page 32.
- “Using the Configure SNMP Agent Task” on page 43.
- “Using the CIM Events Task” on page 44.

## Using the Asset ID Task

The Asset ID task offers information on all your IBM hardware. The following tabs are available under Asset ID:

### **Serialization**

Serial numbers for your specific hardware.

**System** Current system characteristics: system name, MAC address, user login name, operating system, UUID address, IBM LANClient Control Manager (LCCM) Profile, and last LCCM update.

**User** The user profile: user name, phone number, work location, department, and professional position.

**Lease** Information on the lease agreement for the system hardware.



---

**Asset** Inventory factors related to your computer.

**Personalization**

A free-form screen where you can add information on your systems, users, or computers.

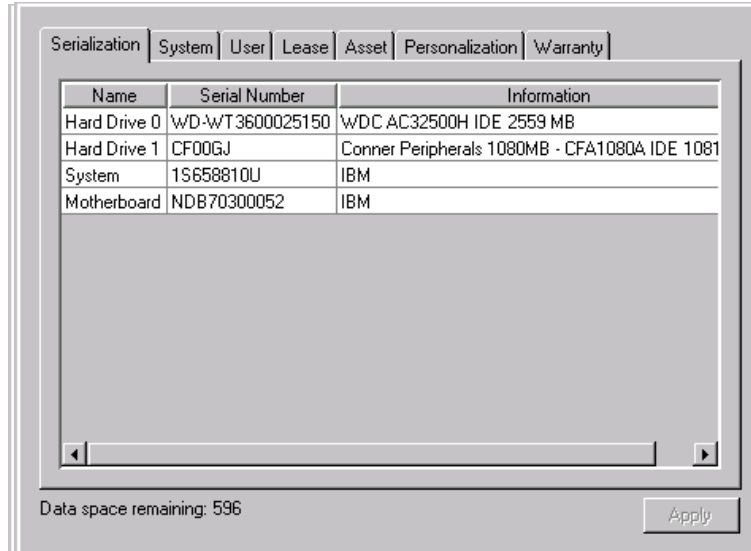
**Warranty** Information on the warranty agreement for your system hardware.

When you click **Asset ID** from the UM Services task list, the system displays the Serialization screen. To access any of the other Asset ID screens click on the appropriate tab.

---

## Serialization

The Serialization screen displays the serial numbers for the various pieces of system hardware. The Name column displays the hardware name, the Serial Number column displays the serial number for that piece of hardware, and the Information column displays descriptive information for that piece of hardware.



The screenshot shows a software window titled "Serialization" with several tabs: "System", "User", "Lease", "Asset", "Personalization", and "Warranty". The "System" tab is active, displaying a table with three columns: "Name", "Serial Number", and "Information". The table contains four rows of hardware data. Below the table is a horizontal scrollbar and a status bar indicating "Data space remaining: 596". An "Apply" button is located in the bottom right corner of the window.

Name	Serial Number	Information
Hard Drive 0	WD-WT3600025150	WDC AC32500H IDE 2559 MB
Hard Drive 1	CF00GJ	Conner Peripherals 1080MB - CFA108QA IDE 1081
System	1S658810U	IBM
Motherboard	NDB70300052	IBM

---

## System

The System screen displays information about your network system.

Click **Asset ID** → **System** to display the System screen.

Serialization System User Lease Asset Personalization Warranty

System Name NETFIU99

MAC Address 00:04:AC:C6:26:35

Login Name NETFIU99

Operating System Microsoft Windows NT Server

System UUID 26827882-222B-2112-A91A-0004ACC62635

LCCM Profile Accounting

Data space remaining: 42

Apply

The following table provides item descriptions.

Item	Description
System Name	The NetBEUI name of your system. NetBEUI stands for the NetBIOS extended user interface, where NetBIOS stands for network basic input output system. (The computer name as it appears under Network Properties).
MAC Address	The unique hexadecimal character string that identifies your system network adapter card.

Item	Description
Login Name	The user ID that the administrator determined at installation.
LCCM Profile	The profile name of the IBM LAN Client Control Manager (LCCM), if applicable.
Operating System	The operating system (for your PC or for the computer where UM Services resides).
System UUID	The system Universally Unique Identifier (UUID). Your BIOS unique ID number.

## User

The User screen displays information about the logged in user.

Click **Asset ID** → **User** to display the User screen.

The screenshot shows a software interface with a tabbed menu at the top. The tabs are: 'Serialization', 'System', 'User', 'Lease', 'Asset', 'Personalization', and 'Warranty'. The 'User' tab is currently selected. Below the tabs, there are five text input fields, each with a label to its left: 'Name', 'Phone', 'Location', 'Department', and 'Position'. At the bottom of the window, on the left side, it displays 'Data space remaining: -21'. On the bottom right, there is a button labeled 'Apply'.

The following items are available on the User screen.

Item	Description
Name	The user login name.
Phone	The user phone number.
Location	The user office location.
Department	The user department name or number.
Position	The user job title.

## Lease

The Lease screen displays lease information on the computer where UM Services resides.

Click **Asset ID** → **Lease** to display the Lease screen.

The screenshot shows the 'Lease' screen with the following fields and controls:

- Tabs: Serialization, System, User, Lease, Asset, Personalization, Warranty
- Lease Start Date: January (dropdown), 1 (spin), 1999 (spin)
- Lease End Date: January (dropdown), 1 (spin), 1999 (spin)
- Lease Term (Months): [Text Input]
- Lease Amount: [Text Input]
- Lessor: [Text Input]
- Buttons: Apply
- Status: Data space remaining: -21

The following items are available on the Lease screen.

Item	Description
Lease Start Date (mm/dd/yy)	The date that your lease agreement began.
Lease End Date (mm/dd/yy)	The date that your lease agreement ends.
Lease Term (months)	The number of months you leased your computer.
Lease Amount	The total price of the lease agreement.
Lessor	The name of the company that leased the computer.

## Asset

The Asset screen displays inventory information about your screen.

Click **Asset ID** → **Asset** to display the Asset screen.

The screenshot shows a software interface with the following elements:

- Tabs: Serialization, System, User, Lease, **Asset**, Personalization, Warranty
- Purchase Date: January (dropdown), 1 (spin), 1999 (spin)
- Last Inventoried: January (dropdown), 1 (spin), 1999 (spin)
- Asset Number: [Empty text field]
- RF-ID: [Empty text field]
- Bottom left: Data space remaining: -21
- Bottom right: Apply button

The following items are available on the Asset screen.

---

Item	Description
Purchase Date (mm/dd/yy)	The date the computer was purchased.
Last Inventoried (mm/dd/yy)	Date of last inventory check.
Asset Number	A unique number that is assigned to the computer for inventory purposes.
RF-ID	The radio-frequency identification (RF-ID) number encoded in the computer by the manufacturer. Not all computers have RF-ID capabilities. This is a fixed field and cannot be changed.

---

## Personalization

The Personalization screen is a free-form screen where you can enter information about your users, system, or computer. There is a 32-character maximum for each of these fields.

Click **Asset ID** → **Personalization** to display the Personalization screen.

The screenshot shows a software interface with a navigation bar at the top containing tabs for 'Serialization', 'System', 'User', 'Lease', 'Asset', 'Personalization', and 'Warranty'. The 'Personalization' tab is selected. Below the navigation bar is a table with two columns: 'Label' and 'Value'. There are five rows of empty text input fields in each column. At the bottom left of the form area, it says 'Data space remaining: -21'. At the bottom right, there is an 'Apply' button.

Label	Value
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Data space remaining: -21

Apply



---

## Warranty

The Warranty screen displays information about your system warranty.

Click **Asset ID** → **Warranty** to display the Warranty screen.

The screenshot shows the Warranty configuration screen. At the top, there are tabs for 'Serialization', 'System', 'User', 'Lease', 'Asset', 'Personalization', and 'Warranty'. Below the tabs, there are three input fields: a text box for Asset ID, a text box for Cost, and a date selector for End Date (Month, Day, Year). The End Date is currently set to January 1, 1999. At the bottom left, there is a red status message: 'Data space remaining: -21'. At the bottom right, there is an 'Apply' button.

The following items are displayed on the Warranty screen.

Item	Description
Duration (months)	The duration of your warranty agreement.
Cost	The total cost of your warranty.
End Date (mm/dd/yy)	The date that your warranty ends.

## Configure Alert On LAN

A user with administrative security-status can use the Alert On-LAN task to set the options related to network system alerts.

---

When you click **Alert On-LAN** from the Netfinity Director Tasks pane, the system displays the following screen.

System UUID: 949751A5-B649-2112-B90F-0004AC96305F

Alert transmission status:  Enabled  Disabled

Event auto-clear:  Enabled  Disabled

Proxy server (IP address:Port): :5500

Heartbeat timer period (seconds): 0

Watchdog timer period (seconds): 0

Transmission attempts: 3

Event polling period (seconds): 30

The following items are available on the Alert On-LAN screen.

Item	Description
System UUID	A Universally Unique ID (UUID) is assigned to each system board for system-management purposes.  The UUID is stored in the BIOS on the system board.
Alert Transmission status	Select <b>Enabled</b> or <b>Disabled</b> . This option determines whether the system alerts are on or off.
Event auto-clear	Select <b>Enabled</b> or <b>Disabled</b> . If this option is enabled, the system sends an alert each time the condition is present (multiple alerts). If this option is disabled, the system sends an alert for a condition only once (no reminder alerts).

Item	Description
Proxy Server IP Address	The internet protocol address for the server you use to communicate with your client computers. The IP Address is determined by your system administrator.
Heartbeat Timer Period	The Alert On-LAN proxy computer verifies that the client computer is running. This is the number of seconds between system checks, values are 43-5461 in increments of 43. The default value is 0. Zero indicates the timer is off.
Watchdog Timer Period	If the watchdog timer indicates that a client computer has stopped, the watchdog timer automatically sends a message to the proxy computer. This is the period between polls for the watchdog timer (measured in seconds), values are 86-5461 in increments of 86. The default value is 0. Zero indicates the timer is off.
Transmission attempts	The number of retries for transmission after your system stops. The default value is 3.
Event Polling Period	The polling period for software problems. The default value is 30.

If you make any changes to your default user options for Alert On-LAN, click **Apply** to save your options and return to the UM Services main screen.

## Using the Configure SNMP Agent Task

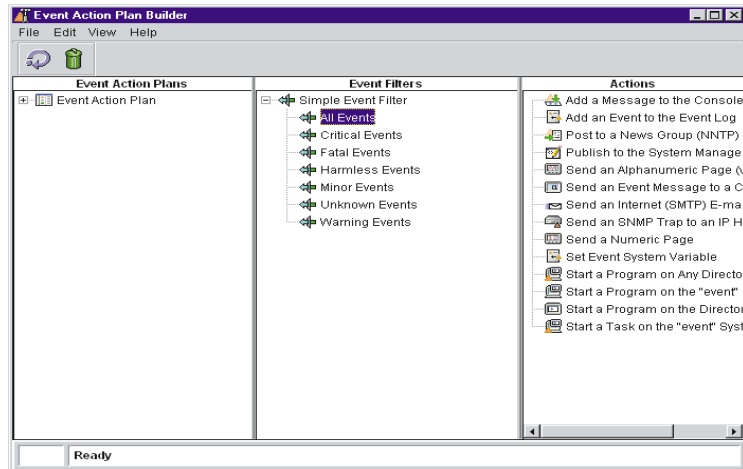
The Configure SNMP Agent tool supports IBM hardware only. This tool listens for SNMP traps from specific IBM products and translates them into Netfinity Director alerts.

---

## Using the CIM Events Task

Netfinity Director includes UM Services CIM events. You can access these events through the ND **Event Action Plan Builder** window. Take the following steps to access these events:

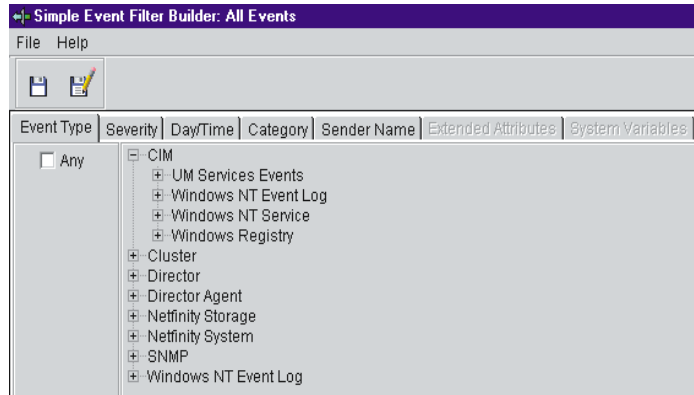
1. From the Netfinity Director toolbar, click the **Event Builder** icon. The **Event Action Plan Builder** window opens.



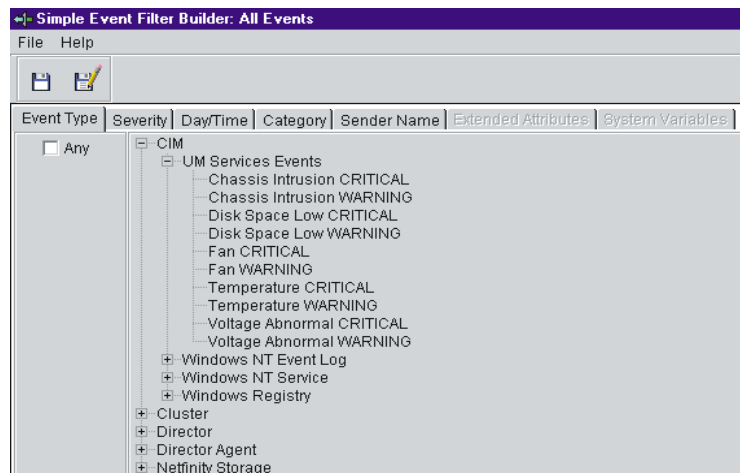
2. Expand the **Simple Event Filter** tree and double-click on **All Events**.

The **Simple Event Filter Builder** window for **All Events** opens.

3. Deselect the Event Type **Any** checkbox.
4. Click on the plus sign next to **CIM**, expanding the tree.



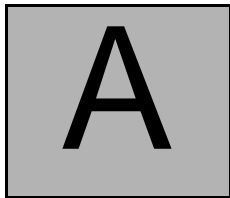
- Click on the plus sign next to the **UM Services Events**, expanding the tree.



The following UM Services CIM event types are displayed:

- Chassis Intrusion CRITICAL
- Chassis Intrusion WARNING
- Disk Space Low CRITICAL
- Disk Space Low WARNING

- 
- Fan CRITICAL
  - Fan WARNING
  - Temperature CRITICAL
  - Temperature WARNING
  - Voltage Abnormal CRITICAL
  - Voltage Abnormal WARNING



# Upgrading from Netfinity Director to Tivoli IT Director

---

This appendix contains information on the features you will gain by upgrading Netfinity Director to the management products from Tivoli Systems. The upgrade will provide a comprehensive systems management solution, save the costs of redeployment, and retain the hardware management features of Netfinity Director.

You can purchase the upgrade from any authorized Tivoli Reseller. Please visit the Tivoli Upgrade page at

[http://www.tivoli.com/tivoli\\_upgrade](http://www.tivoli.com/tivoli_upgrade)

to find more information about the upgrade or to locate a Tivoli Reseller near you.

## Features in Tivoli IT Director

The Tivoli upgrades from Netfinity Director provide the full systems and application management capabilities of Tivoli IT Director while retaining the hardware management functionality of Netfinity Director.

New functionality, added by upgrading, includes:

- Software Distribution
  - Distribution templates for Microsoft Office, Microsoft Outlook, Lotus Notes, Symantec Antivirus, and other software products

- 
- Package creation wizards for Adobe Portable Document Format (PDF) and InstallShield
  - Custom File Packages
  - Application Management
    - Web server management included
    - Ability to add Tivoli solution modules:
      - Tivoli Manager for Microsoft SQL
      - Tivoli Manager for Microsoft Exchange
      - Tivoli Manager for Lotus Domino
    - Ability to add modules from partner solutions, such as Symantec, ABC Systems, Troika Software, and JSB Corporation
  - Problem Management
    - Built-in problem manager
  - Network Management
    - Compile, browse, and manage any SNMP MIB
  - IT Management Homepage
    - Management website publishing and web-cast channel capability
  - Enhanced group management
    - New capabilities for monitoring and event management
  - Support for managing the IBM AS/400 platform



# B

## Using Netfinity Director with Tivoli Enterprise

---

Some Netfinity Director components are designed to work with Tivoli Enterprise Framework (i.e. TME 10). For example, the UM Services Client has an installation option for the Tivoli Management Agent (endpoint), and Netfinity Director has an installation option for a TMR Gateway. When utilizing the TMR Gateway feature in Netfinity Director, there are some feature differentiations.

First, the TMR Gateway in Netfinity Director is not a true Tivoli Enterprise Framework gateway. You cannot:

- Migrate endpoints to Netfinity Director
- Assign the gateway to the endpoint using the `lcs.login_interfaces` setting
- Use any of the `w` commands.

Secondly, the Netfinity Director TMR Gateway is designed to listen only for broadcast logins (as opposed to "normal" logins) from endpoints. If it hears a broadcast login from an endpoint, it will respond back to the endpoint and imitate enough of the semantics of a "true" Tivoli Enterprise Gateway to satisfy the login request. Afterwards, it will execute one downcall, the installation of the Netfinity Director agent.

In using Netfinity Director inside a Tivoli Enterprise network, please be aware of the following conditions:

- 
- The ID that you configure on the Director TMR Gateway discovery preferences dialog is just a placeholder. If you do not pass one to the endpoint during its login, login recognition does not occur. The ID has no preferred or set value and can be set to any set of alphanumeric characters.
  - The Netfinity Director TMR Gateway does not interact with other Tivoli TMR gateways.
  - Currently, Netfinity Director does not support the distribution of unique RSP files for installations using the TMR Gateway method.

To enable communication between the Tivoli endpoint and the Netfinity Director TMR Gateway, you must configure the endpoint broadcasting feature. Set the `bcast_disable` parameter in the `lasg.cfg` file of the endpoint to **0** (the default). For best results, shut down any true TMR Gateways that may be running in the broadcast space of the Tivoli Management Agent endpoint. See the section, "Enabling Additional Functions," in Chapter 4 of the *UM Services User's Guide* provided on the *Netfinity Director with UM Services CD* for more information.

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